ATHLETIC JOURNAL

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Eddie Finnigan

Progress In the Shot Put
Tom Jones

Why We Fly the Breast Stroke
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Volume XXVIII **Number 7**

CONTENTS

PAGE

4. From Here and There
6. Decathlon Champions — Bill Easton
8. Harrison Dillard—Hurdler — Eddie Finnigan
10. Progress In the Shot Put — Tom Jones
18. Editorial
20. Base-Running — H. S. DeGroat
28. Track and Field Records 1896-1946 — Frank C. Potts
31. Running the Ends In the T — Forrest England
34. Tennis Fundamentals — Vincent Richards
36. A Test of National Cultures — Albert Lumley
38. Starter Vs. Pistol Firer — Larry Snyder
43. A New Technique for Teaching Downfield Blocking — Sol Kampf
46. New Books
50. Why We Fly the Breast Stroke — Richard O. Papenguth
54. New Ideas In Taping — Roland Logan
66. New Items

FRONT COVER ILLUSTRATION

Merwin McConnell, University of Oklahoma broad jumper. A Sophomore this year, McConnell did 23' 9" in freshman competition last year. He graduated from Hollis, Oklahoma, High School where he was high point scorer in the Oklahoma Class B Interscholastic meet.

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A-51

from here and there

TWO high school coaches have been signed to assist Harry Stiteler at Texas A. & M. They are Bill DuBose of Waco High School and Barlow "Bones" Irwin of Jefferson High School in San Antonio. . . . Sam Ketchman, popular athletic director at East Lansing, Michigan, High School sends along some interesting figures on what it costs to put a championship football team on the field. The actual game expenses, but not the coaches' salaries, figures to $25.07 for every member of its varsity, reserve and freshmen football squads. Sam carries it out further and figures that it costs 54 cents every time a player puts on his equipment. We carried it still further and estimated that it costs approximately two-tenths of a cent for every minute per man. Michigan spends on the average $116.47 per student per year for education. Figuring a school year to be 180 days, the cost per student for education is slightly less than two-tenths of a cent per minute for general education, or practically the same as the cost for football. . . . Sam's friend, Lou Zarza, returns to the Middle West and takes over as line coach at Indiana, succeeding Don Veller who goes to Florida State as head coach. Lou was line coach at Santa Clara last year. . . . Ed Weir, Nebraska's track coach, has produced something of a record by having his pole vaulter the Big Seven champion for eight years running. Leonard Kehl who placed third in the national high school honor roll with a vault of 12-9⅞ is enrolled at the Cornhusker institution to carry on what appears to be fast becoming a tradition.

* * *

WE DIDN'T know it, but George Gipp, the Notre Dame immortal, was a freshman at the University of Detroit before enrolling at the South Bend institution. . . . Al De Luca who has been freshmen coach at Duquesne, has been appointed head football coach at St. Vincent's College at Latrobe, Pennsylvania. . . . Dennis J. Lavender, former Dallas Open Golf champion, has been named golf coach for the U. S. Miliary Academy. . . . The dates and sites for the National Junior College Athletic Association championship events are as follows: Swimming, April 24, Compton, California, College; track and field, May 6 and 7, Phoenix, Arizona, College; tennis and golf, May 30 and 31, Wentworth Military Academy, Lexington, Missouri. . . . One of last year's coaching schools has already announced its intention to hold a school this year, and that is Adams State. This will be good news to the many who attended last year and were eloquent in their praise of the facilities and staff. . . . Francis Cretzmeyer has had a meteoric rise in the track profession. An Iowa star in 1936 he coached North High School in Des Moines and last fall took over the track duties at Grinnell College. Now it is announced that he will succeed his old coach, George Bresnahan, when the latter retires this June. . . . This spring will mark the passing from the track picture of three who have meant much to the sport. In addition to Bresnahan, Dean Cromwell and Tom Jones are retiring. It is interesting that these three have authored the three bibles on the sport. Jones' book, now out of print, was published in 1925. Cromwell's book, "Championship Technique in Track and Field" was published by McGraw Hill and Bresnahan's book, "Track and Field Athletics," now in its second edition, was published by C. V. Mosby Company.

* * *

THE Virginia High School League was admitted to membership in the National Federation. Virginia thus became the forty-fourth state to join the set-up. . . . Woody Sponaugles, the new football coach at Franklin & Marshall will have his brother, Boyd, as his assistant. . . . In a poll conducted by the "Des Moines Register," baseball, basketball and football ranked in that order as the sport Iowans enjoy watching the most. By age groups the picture is somewhat different. For those in their twenties football ranks first with basketball in the number one spot for those thirty-one to forty, and for forty and over the preference is baseball. . . . Michigan this year is holding its first state high school wrestling meet. . . . Until this year's Texas basketball tournament is over, El Paso High School has the distinction of winning the first and last tournaments. The first tournament was held in 1921 with El Paso winning and then repeating twenty years later and also taking the crown last year. . . . The executive committee of the North Carolina Association has recommended membership in the National Federation and the members of the association will vote

(Continued on page 65)

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Decathlon Champions

By Bill Easton

Track Coach, University of Kansas

WHEN the opening gun of the XII Olympiad is fired in London this summer, the world's most versatile athletes will be seeking the laurel wreath of the Games' Decathlon championship.

The ten events which compose this most gruelling of all Olympic cinder trials are outlined by the International Olympic committee and are stretched over two days of competition, with five events booked in each session. Here is a real test of a man's all-around skill and endurance.

Although the modern Olympic Games were revived at Athens, Greece, in 1896, the decathlon was not placed on the regular card until 1912 when the world's greatest track competitors met at Stockholm, Sweden.

The United States' decathlon entry has been crowned world's champion three times since that date. Here are the winners and their scores:

		Pts.
1912	*Hugo Wieslander (Sweden)	6,220‡
1920	Harold Lovland (Norway)	6,014‡
1924	Harold M. Osborn (USA)	6,877‡
1928	Paavo Yrjola (Finland)	7,116‡
1932	†James Bausch (USA)	7,392‡
1936	†Glenn Morris (USA)	7,900‡

Glenn Morris (USA) did an outstanding job in winning the 1936 (Berlin, Germany) Decathlon, creating a new scoring record of 7,900 points. His performances by events and position are listed below:

400-Meter Run	:49.4 sec	1st
110-Meter Hurdles	:14.9 sec	1st
16-lb. Shot	46′ 3¼″	1st
100-Meter Run	:11.1 sec	2nd
1500-Meter Run	4:33.2 sec	2nd
High Jump	6′ 1″	2nd(tie)
Discus Throw	141′ 1-11/16″	3rd
Broad Jump	22′ 10-13/16″	4th
Pole Vault	11′ 6″	4th (tie)
Javelin Throw	178′ 10-⅝″	8th (tie)

*James Thorpe (USA) won the 1912 Decathlon with 6,791 (new scoring) but was disqualified because he had played professional baseball.

†Both were Kansas Relays Decathlon champions.

‡All points scored under new scoring system.

The Olympic Year 1948 now presents the challenge, "Can the United States win the world's all-around championship again?" This is questionable even though there are several fine athletes capable of performances that could qualify them for this great honor. Last year's National A.A.U. Decathlon championship was again won for the third time by Irving (Moon) Mondschein, New York University's all-around star, matching the three-time win mark set by Harold Osborn of Illinois. Mondschein's total of 6,900 points was below his expectations and far below Morris' Olmpic mark of 7,900 points. Lloyd Duff of Ohio State was runner-up with 6,705 points.

The 1947 Southern Pacific Association A.A.U. Decathlon competition produced an outstanding Olympic candidate in Al Lawrence, University of Southern California hurdler and broad jumper, who scored 6,973 points in the ten-event program. This is the highest score amassed in the United States since 1940. Lawrence appears to be a real threat to any competitor for the title if he prepares for the strenuous grind. Jerry Shipley, U.C.L.A. weightman, was second with 6,591 points.

The 1947 Kansas Relays Decathlon Championship was won by Jack McEwen, University of Colorado broad jumper. His marks were made under adverse weather conditions, but he still scored 6,333 points. McEwen is a fine performer and will return to defend his Kansas Relays championship, Friday and Saturday, April 16-17. Charlie Black, University of Kansas All-American basketball star, was runner-up with 6,240 points. Ross Nichols, graduate Oklahoma A & M hurdler, although scoring only 5,995 points last year for fourth, is in training for a real try for the Kansas Relay Decathlon crown this spring.

Other potent United States possibilities are Jack Kaiser, San Diego State College's all-round star; Mike Lynch, Alhambra High School, Alhambra, California; Floyd Simmons of North Carolina University; Jim Robeson of Indiana University; and John Montgomery of the Los Angeles Athletic Club.

Information from foreign countries indicates real preparation for the Olympic Decathlon championship and lists many outstanding performers who are capable of winning at the London Games. Peter Mullins of Australia indicated championship form in early January when he scored 7,538.34 points in a decathlon event at Sidney. Down Argentine way, Enrique Kristenacher scored 7,011 points in that

(*continued on page 40*)

BILL EASTON was formerly director of the Drake Relays, serving in this capacity for seven years. His teams at Drake University were cross-country champions in 1946 and 1947. Bill is now director of the Kansas Relays which include the decathlon.

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CHAMPION

13.2
IN THE HIGHS
22.3
IN THE LOWS

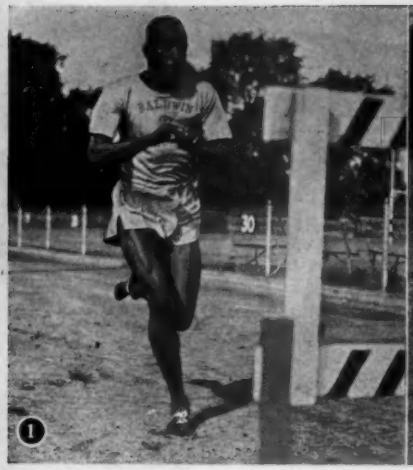
HARRISON DILLARD

BY

EDDIE FINNIGAN

TRACK COACH

BALDWIN WALLACE COLLEGE



HARRISON DILLARD of Baldwin-Wallace College, Berea, Ohio, the present National Collegiate, National A.A.U. Indoor and Outdoor High and Low Hurdle champion, is, according to the history of hurdlers, not an acceptable physical specimen to be the holder of the above records. He stands 5 feet, 10 inches in height, and weighs 153 pounds. In other words, he is short in stature and light in weight according to the old standards of hurdle champions. It is my belief that Harrison represents the new era of high hurdlers and definitely is the greatest improvement in the field of low hurdlers the world has ever seen. He is a graduate of East Technical High School, Cleveland, Ohio. His best high school records, made as the state champion, were 24.4 seconds in the 220-yard lows, and 14.4 seconds made in the 120-yard highs. During his time in high school, his coach, Ivan Green, taught him the fundamentals of his hurdling form with variations so as to fit his stature. His entire first year at Baldwin-Wallace was spent in developing his latent speed from the starting block to the first hurdle, and in taking the first hurdle with complete confidence, relaxation, and blistering speed. This was the beginning of the hurdler who has the unorthodox form of taking off eight feet from the high hurdle and landing five feet away from it and covering this wide expanse of cinders in the same time as consumed by the taller hurdlers in covering twelve feet. During the past years we have timed the fine hurdlers of this country and, notwithstanding human error, we have found that Harrison can complete this thirteen feet in approximately .4 of a second. Last year at the A.A.U. Championships held at Lincoln, Nebraska, Dick Ganslen, who is doing work in physiological research at Rutgers University, using an electric timing device and motion pictures, declared that this over-all hurdle clearance takes Harrison .3 of a second. It might be advisable to mention at this time, that there are hurdlers who have a tremendously high split and fast lead leg snap, who make their clearance of approximately twelve feet in .28 of a second.

It is my belief that Harrison's overcoming the fear of the college hurdle, plus his spring, his great ability as a sprinter, and natural sense of timing and rhythm, have enabled him to run the high hurdles, both indoors and outdoors, in constant championship time.

Even the beginning of Dillard's high hurdle race is a little unusual because of the start that he employs. He uses a modified bunch start which is rarely, if ever, used by hurdlers. His right foot is twelve inches back of the starting line, his left knee five and one-fourth inches back of the same line, and his left foot two inches behind the right heel. Because of his long legs and rather short torso, he discovered that it was much more relaxing to assume a position at the command "get set" in which his head would drop so that no attempt whatsoever is made to look up the track. This allows his shoulder muscles and neck muscles to be completely relaxed at the command.

At the firing of the gun, his left foot is catapulted out to twenty-four inches beyond the starting line, and as in all good hurdlers, within six strides he has the same degree of lean as he has during the race. At this time, his head immediately comes up and his eyes are focused on the first hurdle. He takes eight strides to the first hurdle. He is a left-footed hurdler which is a distinct advantage in running hurdles around the turns. The only time during the entire race that his right heel touches the ground is on the hurdle take-off, similar to his take-off for a high jump. Upon taking off, his left knee is slightly bent and completely relaxed so that he places the heel just over the top of the barrier. At this time also, he has started his right arm thrust which brings the right hand approximately to the middle of his left foot. The fingers extend past the lead foot. The chest is placed immediately on or just above the left knee and the left arm and hand are brought back in a sprint arm action, bending at the elbow; the left hand is placed to the side as is shown in Illustrations 2, 3 and 4.

Coming down from the hurdle, Harrison, I believe, differs from the normal hurdler. He makes a great effort to start the trail leg snap down earlier, preferring it to the quick snap down of the lead foot and leg. It may be that coaches and hurdlers should be more conscious of the time that elapses from the time the trail leg leaves the ground till the time that the same leg hits the ground. This concentration of bringing the trail leg down faster will automatically bring the lead leg down fast enough. On the swing up of the trail leg, the swing comes from the level of the waist and the knee of his right

leg is almost brought to the level of his waist. As he comes over the hurdle, his knee has a tendency to stay higher and his right foot has a tendency to leave the horizontal plane that is usually maintained with the trail foot. This is the reason for the somewhat slow recovery of the right arm to its normal sprint action. The arm must stay back a little longer to allow the high knee action to be executed. He eyes the next hurdle only after his trail foot hits the ground. His clearance of the hurdle is approximately two inches in the highs.

In the running of the 120-yard high hurdles he uses full sprinting speed for the first four hurdles and employs a speed float for the fifth and sixth hurdles. During this speed float he is at complete ease which enables him to gather the stamina and energy for the final burst of the last four hurdles. His best time in the 120-yard high hurdles to date, is 13.9 seconds, run at the National Collegiate Championships in Salt Lake City in 1947.

Training Program

Dillard's season normally lasts eight months. The winter season is spent primarily with emphasis on starts and on the time elapsing from the firing of the gun to the clearing of the first hurdle. This spring practice and speed practice is tremendously important in the indoor hurdle races of short distances and also serves as a fine builder of legs and reaction. At the conclusion of the indoor season, Harrison competes on the sprint relay team and I believe that this enables him to build up the speed that he has for running the low hurdles in the later season. His tremendous speed in the relays was brought to light last spring at the running of the Drake Relays when he anchored the Baldwin-Wallace College 880-yard relay team to victory with an unofficial 20.6 seconds around a 220-yard curve. Both in the running of his sprints and hurdles he employs a very characteristic Dillard finish. It is a definite lean into the tape and is accompanied by an increase in the length of the last few strides before crossing the finish line. His body is approximately at a 40-degree angle when he hits the tape.

I believe that Dillard's daily workouts represent the prime reason for his success. Each day he warms up for forty-five minutes by doing calisthenics and stretching exercises. His is without question the most tireless trainer in the field of track that I have ever seen or known. He is tremendously interested in the success of his fellow team mates and has been more than helpful in the success that they, as a team and as individuals, have attained. It might be well to mention that in the 220-yard low hurdles (which he has run in 22.3 seconds, the present world's record) he employs not only physical strength and courage, but a complete mental study of his opponents in each big race. In the lows, he sprints from the start of the race for 100 yards and then employs his speed float until he approaches the eighth hurdle. Again he puts his burst on and finishes the race with tremendous speed and form.

The United States prospects for the coming Oympics are indeed bright in the 110-yard meter field. Along with Harrison Dillard, this nation has such fine hurdlers as Bill Porter of Northwestern University, Craig Dixon of U.C.L.A., "Smackover" Scott of Arkansas University, George Walker of Illinois, Horace Smith of Michigan State, John Smith of Notre Dame, Floyd Simmons of North Carolina University, and of course, that great champion, Ed Dugger, formerly of Tufts College.

In summary, I believe that the key to Harrison's entire success is his own desire to excel in the field of sprinters and hurdlers. He lives for track and I am sure that each individual who has witnessed his many record-breaking performances, recognizes the fact that courage, stamina, speed and a desire to excel are the requisites of our American champions.

Illustration 1 shows the start of the take off. Note the forward body bend. Illustration 2. His knee position is excellent and he shows good arm action. Illustration 3. Body is bent forward with lead arm and leg almost parallel. Illustration 4. A little higher clearance than usual, but note the excellent body bend and how the arm and leg have reached a completely parallel position. The trail arm is placed to the side. Illustrations 5 and 6. Compare Dillard's form with other hurdlers and note how he brings the trail foot down faster. This automatically will bring the lead foot down. Dillard has landed and is sighting the next hurdle.

PROGRESS IN THE SHOT PUT

By T. E. Jones
Track Coach, University of Wisconsin

Tom Jones is one of the nation's top track coaches having been in the game for over thirty years. Besides having produced numerous champions in all events, Tom was one of the founders of the National Collegiate Athletic Association track and field meet. This is the fourth historical article of this type that he has prepared.

WEIGHT throwing, like the human activities of running and jumping, is one of the oldest feats of athletic prowess; it was undoubtedly done long before recorded history.

The shot put is claimed to be of Celtic origin—Scot and Irish—and evolved from putting the stone. It is referred to in the Book of Leinster as one of the events in the Tailtin Irish games. Sir Walter Scott wrote of putting the stone as an important event in the National Scottish Games which had their origin in the highlands. Webster, an English author, writes that the definite period of its origin cannot be named and states that shot putting is as old as the hills from which the rocks were reft that supplied the first contestants with their equipment.

During the middle ages weight putting was so popular that King Henry VIII, himself a devotee, prohibited its practice because it threatened to replace archery.

Because throwing is a fundamental activity common to all, everyone at some time finds pleasure in testing his athletic prowess in this manner. Most of our modern games include the element of throwing.

Shot putting has evolved into its present standard form through several important changes. First, the haphazardly chosen stone was changed to an iron-shaped block; then to a ball-shaped missile. Weights of varying poundage, 8, 12, 14, 16, 18, 21, and 24 pounds were used in contest. The shot is now standardized into three weights, sixteen pounds for men, twelve for high school boys, and eight pounds for women and younger boys of grammar school age.

In this evolution, important changes in the *method* of putting have also occurred. Old pictures show that the initial momentum was generated with an unlimited run to a restraining line or a joist. This was reduced to a nine-foot square, then to a seven-foot square. In 1875 the seven-foot square was changed to the present seven-foot circle.

The shot put has been a regular event on the championship programs of the A.A.U. and the Intercollegiate Associations since 1876.

Jack Torrance in 1934 set the present best hand records of 57′ 1″ with the sixteen-pound shot. Ralph Rose holds the record for the best aggregate throw of both hands at 91′ 10½″ (right, 50′ 6″; left, 41′ 4½″). This event was discontinued after the Olympic Games of 1912. A study of the record chart shows that 51-foot shot putters are common now and that there are many names on the left side of the record line that deserve recognition. Ralph Rose with his phenomenal put of 51 feet in 1905, which stood the challenge for nineteen years, would not have placed in the National Collegiate Meet of 1947 where four men put better than 54 feet and even a sixth man put 52′ 8⅞″.

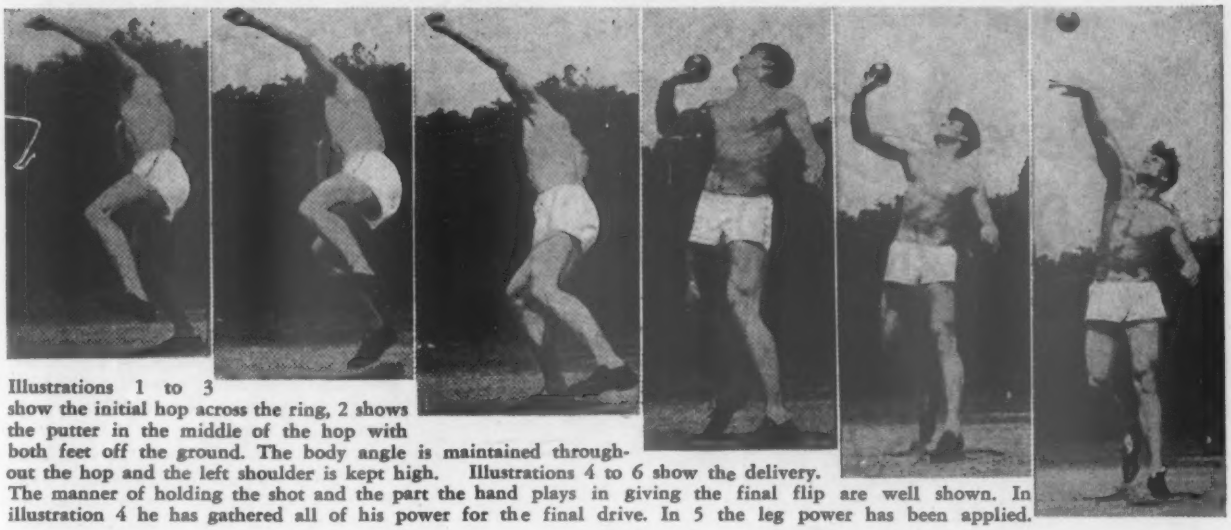
In 1876 the American championship was won with a record put of 32′ 5″. Comparing this with the present record of 57′ 1″ we note a gain of 24′ 8″ in the 70 years of record breaking history. Are we then to conclude that we are endowed with more strength than our forefathers? I think not. This great progress in performance is explained by: 1. Better technique, better muscular co-ordination; 2. A greater number of men participating; 3. A greater number of men with powerful physiques, speed, and spring now attending our colleges and receiving expert coaching; and 4. The use of motion pictures taken at high speed and projected in slow motion have been a great help in the study and analysis of the successive movements of champions.

The type best adapted for the event has weight, height, strength, speed, co-ordination, explosive force, and competitive spirit.

The event requires strong wrists and hands. The arms and legs should also be well developed. While size is a big advantage, it is not the deciding factor. Success in the event depends largely on the mastery of form which is the application of correct mechanical principles. For this reason attention must first be centered on the technique of the event. Form is what wins, other things being equal. One will be approaching good form when he has the ability to get the body weight behind and under the shot with speed, explosive force, and rhythm.

Shot-putting technique may be analyzed under the following headings: 1. The grasp. 2. The initial position. 3. Preliminary leg swing. 4. The hop or glide. 5. The forward rock of the feet and body. 6. The put or delivery. 7. The follow-through of the arm thrust. 8. The wrist and finger flip. 9. The reverse.

The shot should be held on the center joints of the fingers, the weight resting principally on the base of the middle two fingers. The back of the hand is tipped back from the wrist, the thumb to the front and the little finger spread slightly to help grasp and balance, leaving the index, middle and third finger as nearly as possible directly behind the center of the shot. The size of the hand will



Illustrations 1 to 3 show the initial hop across the ring, 2 shows the putter in the middle of the hop with both feet off the ground. The body angle is maintained throughout the hop and the left shoulder is kept high. Illustrations 4 to 6 show the delivery. The manner of holding the shot and the part the hand plays in giving the final flip are well shown. In illustration 4 he has gathered all of his power for the final drive. In 5 the leg power has been applied.

cause some individual differences. As the strength of the wrist and fingers develop, the shot should be moved up higher on the fingers; by doing this, added follow-through and snap is gained for the wrist and finger flip.

The rules require that the shot must not be held behind the shoulder, otherwise the effort becomes a throw, not a put.

The shot should be held in the left hand until the competitor is ready to start putting. The position of the putting arm varies with different putters. There are several methods being used: 1. The elbow may be back in line with the shoulders. 2. It may be held down against the body. 3. It may be down and out from the body. 4. Some of the best hold the elbow away from the body. Some hold the shot away from the neck, the elbow down and to the side and rear. It would be well for one to experiment because of individual differences in body build.

There may be an advantage in holding the shot away from the neck to the side and rear if the arm is strong enough because it gives a longer distance to apply the force. This, however, approaches an illegal put.

In general, the shot is held close to the neck, the elbow in line with the shoulder, the right forearm pointed in the direction of the put.

The right foot is placed at the back edge of the circle at right angles to the direction of the put, the feet about 24" apart.

The weight is shifted to the right leg, which is slightly flexed or in a semi-crouched position. The body is bent to the right from the waist, the right shoulder is dropped, the chest and head are up.

The left arm is extended in a semi-relaxed manner in the direction of the put. It serves as a balancer to offset the weight of the shot. The arm and the entire left side of the body should remain quite relaxed.

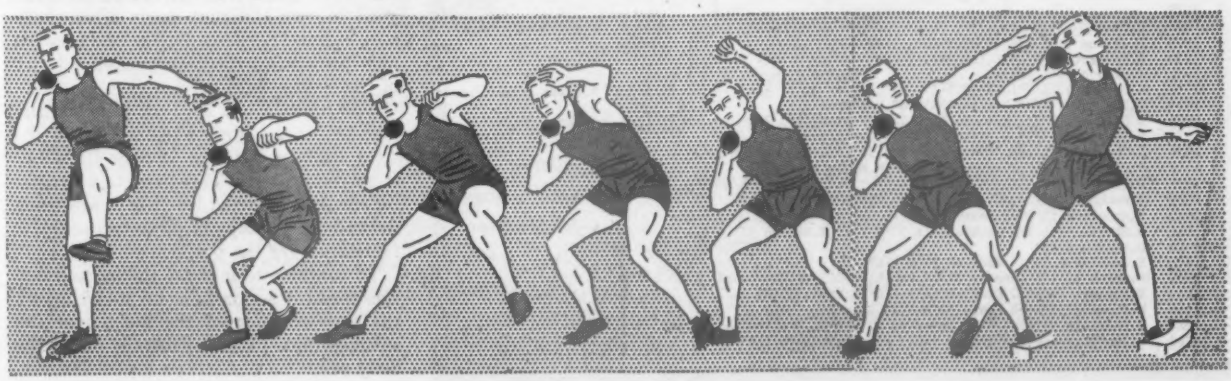
The crouch of the sustaining leg should not be so low as to affect the co-ordination or to prevent the development of momentum in your glide.

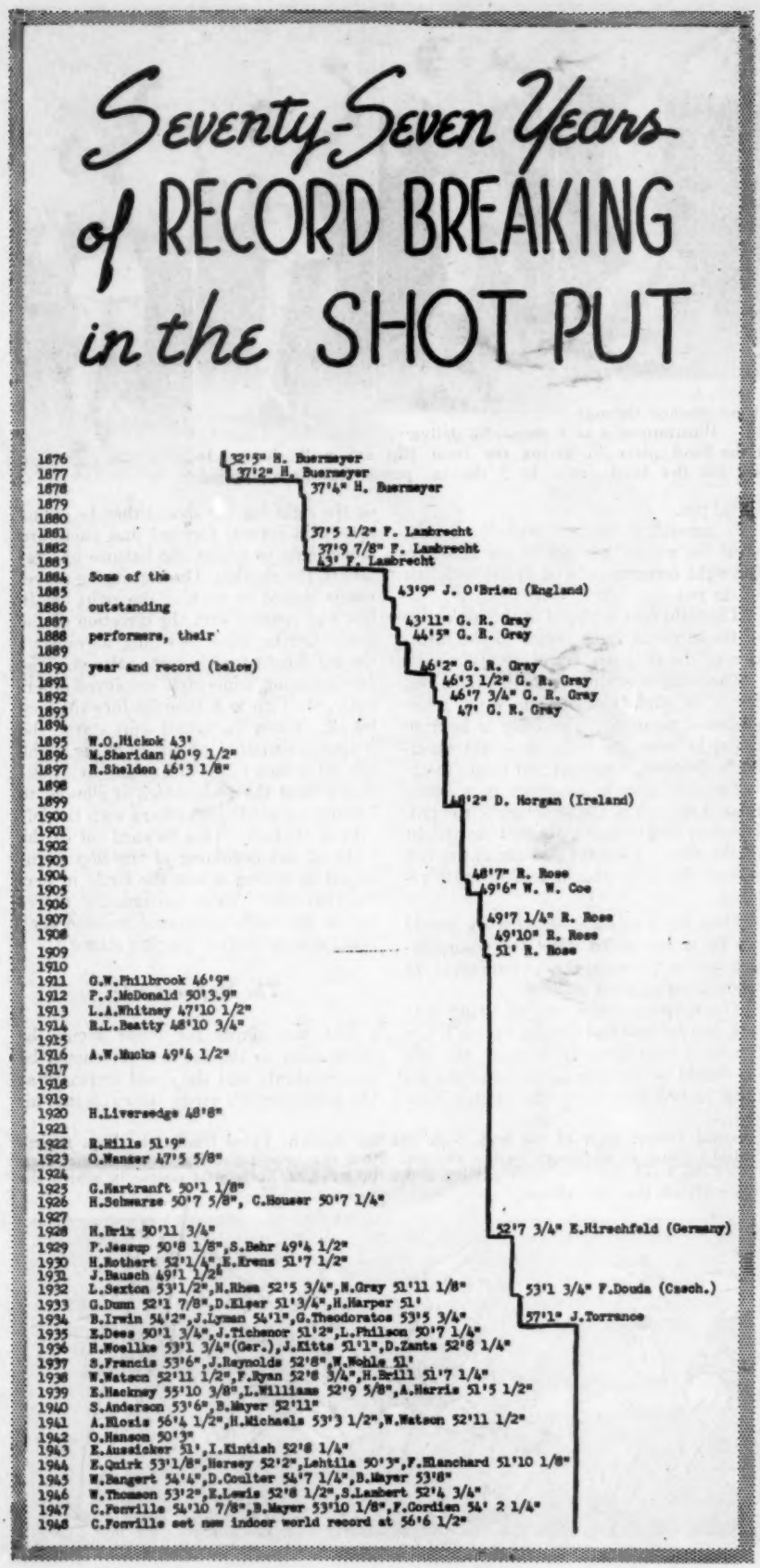
The purpose of the free leg swing is to establish balance and develop speed. When the contestant is ready to start, the left leg should be partially flexed and the knee lifted in order to throw the balance back on the right leg. It should then be swung loosely in several forward and backward movements to adjust the balance and establish the rhythm. These swinging movements should be back of the right leg, in line and parallel with the direction of the put. During these swinging movements the leg should remain quite relaxed. The free leg swing, while often employed differently, ends up in a straight forward kick by all. When the actual shift starts, the weight is sustained on the right leg. The left leg is then raised and swung to a position behind the body which is allowed to balance forward and upward with the left arm in rhythm. This forward tilt of the body at the beginning of the hop seems to aid in gliding across the circle in perfect rhythm. These preliminary moves are of greatest importance because they bring one up to the "putting stance."

The Hop or Glide

The hop across the circle should be made close to the ground. It should be started slowly and the speed increased as the putter travels across the circle into his

First frame: starting position. Keep relaxed. Second frame: start of the hop. Note the low crouch. Third frame: the hop. Fourth frame: start of the forward rock. Fifth frame: Slight pause in footwork before the put. Note the bent right leg. Sixth frame: start of the put. Seventh frame: middle of the put. Note the hard drive of the right leg. Note the straight, horizontal course in which the shot is carried from the start of the hop to the start of the arm thrust.




Seventy-Seven Years of RECORD BREAKING in the SHOT PUT
1876 32'5" H. Buermeyer
1877 37'2" H. Buermeyer
1878 37'4" H. Buermeyer
1879
1880
1881 37'5 1/2" F. Lambrecht
1882 37'9 7/8" F. Lambrecht
1883 43' F. Lambrecht
1884 Some of the
1885 43'9" J. O'Brien (England)
1886 outstanding
1887 43'11" G. R. Gray
1888 performers, their 44'5" G. R. Gray
1889
1890 year and record (below) 46'2" G. R. Gray
1891 46'3 1/2" G. R. Gray
1892 46'7 3/4" G. R. Gray
1893 47' G. R. Gray
1894
1895 W.O.Hickok 43'
1896 M.Sheridan 40'9 1/2"
1897 R.Sheldon 46'3 1/8"
1898
1899 48'2" D. Horgan (Ireland)
1900
1901
1902
1903
1904 48'7" R. Rose
1905 49'6" W. W. Coe
1906
1907 49'7 1/4" R. Rose
1908 49'10" R. Rose
1909 51' R. Rose
1910
1911 G.W.Philbrook 46'9"
1912 P.J.McDonald 50'3.9"
1913 L.A.Whitney 47'10 1/2"
1914 H.L.Beatty 48'10 3/4"
1915
1916 A.W.Hunks 49'4 1/2"
1917
1918
1919
1920 H.Liversedge 48'8"
1921
1922 R.Hills 51'9"
1923 O.Wanser 47'5 5/8"
1924
1925 G.Hartranft 50'1 1/8"
1926 H.Schwarze 50'7 5/8", C.Houser 50'7 1/4"
1927
1928 N.Brix 50'11 3/4" 52'7 3/4" E.Hirschfeld (Germany)
1929 P.Jessup 50'8 1/8",S.Behr 49'4 1/2"
1930 H.Rothert 52'1/4",E.Krens 51'7 1/2"
1931 J.Bausch 49'1 1/2"
1932 L.Sexton 53'1/2",H.Rhea 52'5 3/4",H.Gray 51'11 1/8" 53'1 3/4" F.Douda (Czech.)
1933 G.Dunn 52'1 7/8",D.Elser 51'3/4",H.Harper 51'
1934 B.Irwin 54'2",J.Lyman 54'1",G.Theodoratos 53'5 3/4" 57'1" J.Torrance
1935 E.Dees 50'1 3/4",J.Tichenor 51'2",L.Philson 50'7 1/4"
1936 H.Woellke 53'1 3/4"(Ger.),J.Kitts 51'1",D.Zants 52'8 1/4"
1937 S.Francis 53'6",J.Reynolds 52'8",W.Wohle 51'
1938 W.Watson 52'11 1/2",F.Ryan 52'8 3/4",H.Brill 51'7 1/4"
1939 E.Hackney 55'10 3/8",L.Williams 52'9 5/8",A.Harris 51'5 1/2"
1940 S.Anderson 53'6",B.Mayer 52'11"
1941 A.Klozis 56'4 1/2",H.Michaels 53'3 1/2",W.Watson 52'11 1/2"
1942 O.Hanson 50'3"
1943 E.Aussicker 51',I.Kintish 52'8 1/4"
1944 E.Quirk 53'1/8",Hersey 52'2",Lehtila 50'3",F.Blanchard 51'10 1/8"
1945 W.Bangert 54'4",D.Coulter 54'7 1/4",B.Mayer 53'8"
1946 W.Thomson 53'2",E.Lewis 52'8 1/2",S.Lambert 52'4 3/4"
1947 C.Fonville 54'10 7/8",B.Mayer 53'10 1/8",F.Cordien 54' 2 1/4"
1948 C.Fonville set new indoor world record at 56'6 1/2"

The right shoulder is dropped before starting the hop, not after the landing is made. The shot should not leave its position at the neck and shoulder during the hop. The course of the shot should not be changed. It must be carried in a straight line across the circle. The right foot may land 3 or 4 inches to the right and the left foot may land 8 to 10 inches to the left of this imaginary straight line.

The length of the hop may vary, depending on the distance required for the reverse, the average being about thirty-six inches. It should bring the back foot to a point near the center of the circle. The right foot should come down flat on the ground with the foot slightly open or pointing backward.

Before starting the hop the left knee should be lifted to throw the balance back over the right leg. Too vigorous a forward kick at the start of the glide affects the balance and tends to make it difficult to continue to increase the momentum of the shot. The right foot should not leave the ground until the thighs are stretched by the extension of the left leg. It is then that the right leg drives forward with a low glide.

The landing is made on the right foot near the center of the circle, with the weight still on the crouched right leg. The body is bent to the right so that the right shoulder is well back of the right foot. The right foot should land a fraction of a second before the left foot. The left foot should drop from the toe to a flat-footed position which will help anchor and steady the left side as well as to help bring the left hip forward.

The spread and direction of the feet, as well as the knee flection, must be perfected, because any variance causes a change in the timing and co-ordination of the various forces being applied.

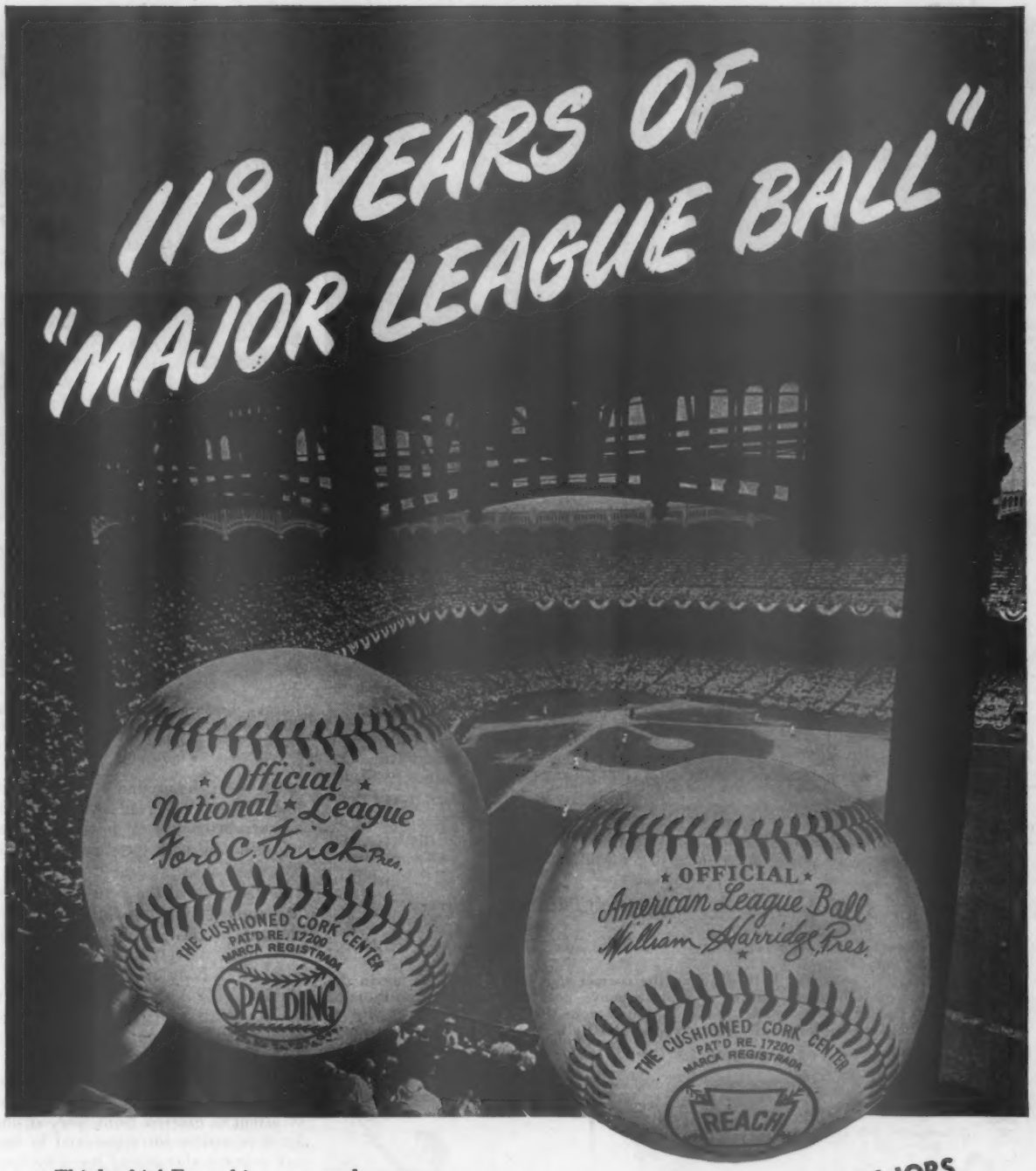
The hop should be co-ordinated in such a way as to get the weight behind and under the shot with speed, yet controlled so as to get a good follow through.

The Forward Rock

The forward rock is a rather difficult movement to describe but a very effective one when perfected. It should be analyzed in two different parts when *body* movements are made, but as one forward movement when the progress and velocity of the shot is considered.

The *right* to *left* leg rock is made first because, at the instant of landing on the right leg, the left foot is 8 or 10 inches from the ground. This permits a natural forward rock on the legs which are being set to hold the hips in place to provide a foundation for the put.

To continue to increase the momentum, this forward action is again taken up by the forward rock of the body over the steadied hips. This is generally called the body whip.



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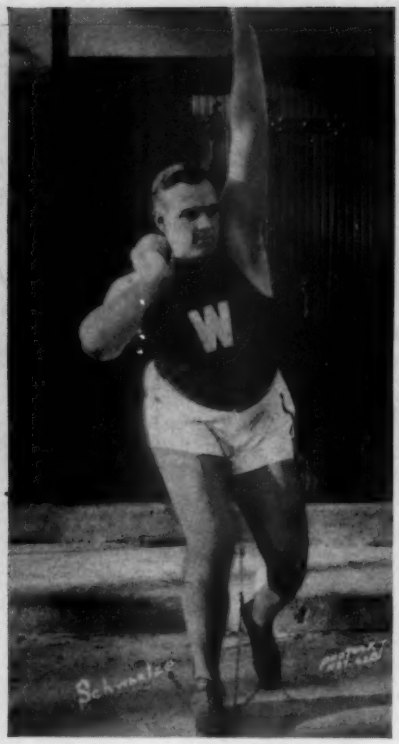
Sam Behr who did 49' 4½" in 1929. Note the excellent initial position.



Herb Scharze a 50' 7 ⅝" putter in 1926 illustrates the start of the leg swing in the hop to the putting stance.

Barney Berlinger won the IC4A meet in 1930 with a put of 48' 7½". Here he shows very good wrist and finger flip.

This rocking forward over the hips should occur *before* the rotation (or twisting from right to left) of the shoulders is started.

The body should rock across and over the hips in the straight line of the put to retain and further increase the speed of the shot.

The position of the shot in relation to the body remains unchanged up to this point. After landing from the top there is no further crouching on the sustaining leg or drawing back of the right arm. The force and speed from the forward body rock must be added by the forward twist of the torso and shoulders and this in turn by the arm thrust and the wrist and finger flip.

The Put or Delivery

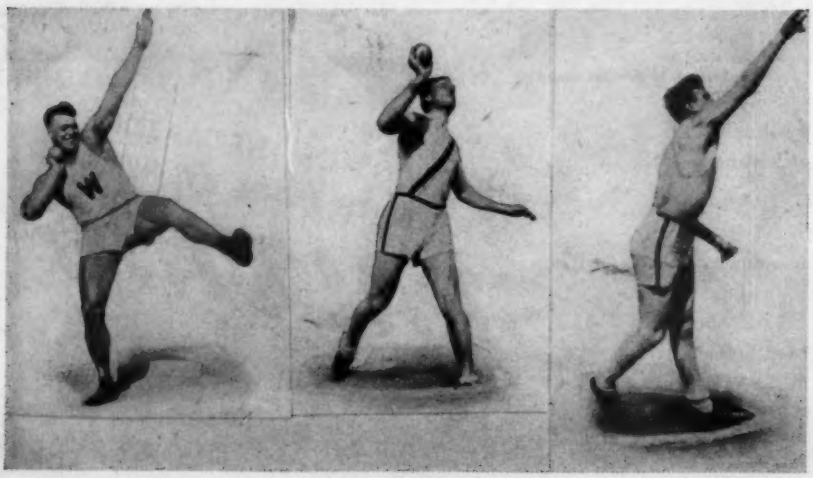
In the delivery of the shot, both feet must be on the ground at the time of the final heave. The real trick in learning is acquiring the art of getting underneath and behind it with speed and the full body weight.

(1) The drive of the right leg which must be applied forcibly and continuously throughout the put, (2) The pull of the muscles of the left side, causing the rocking of the body from right to left over the hips, (3) A quick body twist or right to left rotation of the body to bring the right shoulder forward, (4) The explosive thrust of the right shoulder and arm.

All these forces must be synchronized and closely co-ordinated with every ounce of strength exerted from foot to fingers. Each preceding force involved in the entire delivery should add speed to the succeeding force.

While the forward rock of the body is taking place, the left leg should be stiffened to help stop the forward progress of the body over the toe board and also to help transfer the generated power to the right shoulder. Here many fail to fully use the power of the left transverse muscles of the torso to produce a good body whip. A common error is made in starting the shoulder rotation. This action is one of the most important parts of the entire technique. It is also one of the most difficult to master.

Arlie Mucks 49'4½" putter in 1916 showing the correct start or kick of left leg in the hop or shift across the circle. In the second sequence note the excellent position of body and feet during the heave. In the final frame note the wrist and finger flip at conclusion of heave. Note especially that the shot has left the hand before the reverse has started.



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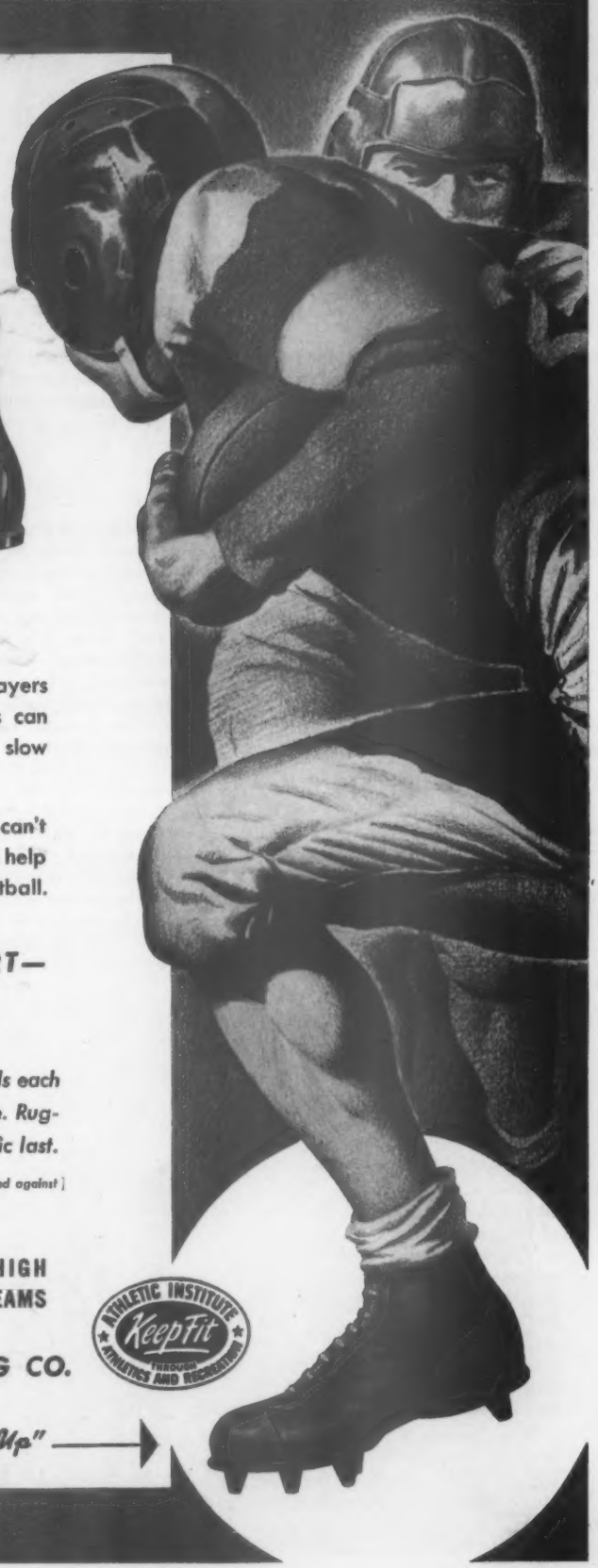

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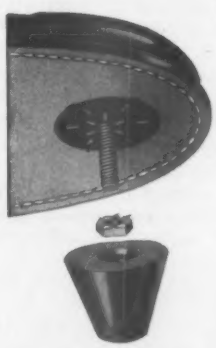

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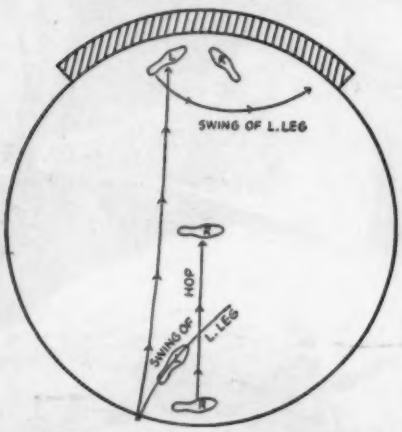
Shot put champions of the Olympics. No. 1. R. Sheldon 1900 champion with a put of 46' 3⅛". No. 2. Ralph Rose won the Olympics in 1904 with 48' 7" and repeated in 1908 with 46' 7⅛". Rose was world's record holder for nineteen years with 51' 0". No. 3. Pat J. McDonald 1912 champion at 50' 4". No. 4. Vitio Porhola of Finland winner in 1920 with 48' 7⅛". This picture shows a very unusual position of the head. No. 5. Clarence Houser 1924 champion with 49' 2½". No. 6. John Kuck won the 1928 games with 52' ¾" No. 7. Leo Sexton the 1932 champion with 52' 6⅜16". No. 8. The present champion Hans Woellke of Germany who put the shot 53' 1 13/16" at the Berlin games.

The face should be turned to the left to allow freer shoulder and arm action as the arm thrust is made along the chin. A slight stiffening of the left leg and side helps add to the elevation and prevents one from getting out of line and over-balancing to the left.

Chart Shows Footwork



The Wrist and the Finger Flip

The wrist and finger flip adds distance to the performance when perfectly executed. To take the shock, the wrist and fingers must be strengthened and practiced in timing the forward flip.

The flip is the final effort of the follow-through movement, which starts with the vigorous drive of the right leg and moves forward with a body rock, a quick rotation of the shoulders and a forward thrust of the arm.

The velocity of the shot should be accelerated from the start of the hop through the body movements to the final flip of the wrist and fingers. This is best done with a fast reverse of the body and a slow reverse of the feet, with a constant pull by the left side of the body and left leg.

These movements should be perfectly co-ordinated so as to bring the entire right side of the body from the right toe to the finger tips in a straight line behind the shot. This also is co-ordinated with a final foot lift from both feet which finishes the drive from toes of both feet.

As the shot leaves the hand it should have an upward rotation.

Reverse

A better understanding of what it meant by the reverse is needed. To the beginner it means just an interchange of the feet at the toe board. Beginners and inexperienced coaches make a mistake of over-emphasizing its importance. The real reverse is in the body action.

The reverse should be considered and analyzed under the factors of 1. body reverse, 2. foot reverse.

The general improvement in recent years is due largely to a change of emphasis on this part of the technique by good coaches. By the reverse of the body is meant the quick rotating of the torso by which the right side of the body becomes the forward side in the forward movement of the right shoulder and arm.

The reverse of the feet is an interchange of the position of the feet from front to back. It should come after the shot has left the hand. In the reverse of the feet, the right leg moves forward to the toe board and the left leg swings backward for balance. The reverse is only important as a follow-through movement which should be made after the put.

A. Bauer, "way back when" shot putter. This picture taken about 1870 shows the missile an iron block and the contestant taking an unlimited run.

Many shot putters reverse too soon by causing the feet to leave the ground before all the power has been applied to the shot.

The reverse of the torso, shoulder, and hips are vital factors of the put, while the reverse of the feet is not. The reverse of the feet helps one to stay in the circle after the follow through.

Some of our best performers do not reverse their feet. They simply bring the right foot forward to the left foot after the throw is completed, to catch their balance.

When a follow through is perfectly done it will find the putter leaning well over the toe board with his right shoulder fully extended with just enough control to balance back into the circle.

Training

A great amount of practice is necessary in learning shot-putting form. It usually takes three or four years to perfect the technique.

All exercises that stretch and strengthen the muscles of the legs, body, arms, wrist, and fingers are valuable. The preliminary training should consist of body-building exercises that also emphasize co-ordination and speed. The legs are a very important factor in good performance. Short wind sprints as well as all sports that develop speed and agility—handball, tennis, squash, volley ball, basketball and football—are valuable.

Some special exercises should also be practiced: 1. deep knee bends, 2. the right-leg drive from a putting stance, swinging over to a crouch on the left leg, 3. pull ups with the leg raising from hanging position, 4. push ups off the fingers with a handclap at the top of push up, one of the best exercises to develop the shoulder, arms, wrists, and hands as it develops quick reactions and explosive type muscles.

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The ATHLETIC JOURNAL

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Again Buy Early

EACH year the National Sporting Goods Association holds an annual convention at which the manufacturers exhibit their various items and the sporting goods dealers place their orders.

This year's show was a sudden reversal of form over the past five years. With a few notable exceptions, allocations are no longer in operation. This indicates, first, that equipment is rapidly approaching a degree of availability. Second, the dealers were shopping around in an effort to buy the best equipment and not take just anything that was available. This is an indication that the schools will be getting better equipment. Third, the fact, which we all know, that prices are high, and fourth, that better distribution will prevent recurrences of problems of last year wherein some localities would find certain items unobtainable, and in other localities the dealers' shelves would be overstocked with the item in question.

With equipment more readily available it is feared that some coaches will delay in ordering for next fall. This, we hasten to advise, will cause many a disappointment. While it is true that certain fill-in items can be secured later, clothing and leather goods should, and must, be ordered within the next month to assure fall delivery.

The manufacture of athletic equipment is a complex and highly skilled business and like every business of any size or consequence requires long-range planning. Last fall the manufacturers estimated what the demand would be for certain articles and what their production would be in regard to these items. The raw materials were purchased on this basis. About this time of the year production facilities are devoted to football. This will continue until September 1 when production will start on basketball, etc. The above illustration represents the ideal set-up. We must realize that numerous factors, such as labor conditions, can cause a disruption of the planned picture.

In discussing the equipment situation with manufacturers both large and small, we were assured that every school would receive the equipment needed for next fall if they ordered by April 15 at the latest. The earlier the order, the more assurance there is that you will not be found wanting come September.

A New Plan for Sports Promotion

RECENTLY a questionnaire was mailed to over 16,000 high schools and colleges by the Athletice Institute. The Athletic Institute is a non-profit organization devoted to the advancement of athletics and recreation. As we have pointed out in the past, there is no connection between the Athletic Journal and the Athletic Institute although there is a similarity in names. It might also be said that our thinking is as close to the thinking of the Athletic Institute as J is to I. Frankly, we have always felt that if athletics is at all worthwhile it needs an organization similar to the Athletic Institute to foster and spread the advancement of athletics. This the Athletic Institute is doing in a most admirable manner.

The latest undertaking of the Institute is tremendous in scope. In fact, it far surpasses any of their previous good works. It is this latest program which pertains to the questionnaire that most of you received. .The Institute reasons, and rightly so, that once an individual, especially a youth, has learned the skills of a particular sport, he or she will become participants in that sport. It is along this line of reasoning that the Institute is embarking on its new program.

Once having decided upon the goal, the question arose as to how best to attain that end. After a year and a half of study, the Institute decided to embark upon a plan for preparing slide films to teach the skills of the various sports. Slide films were chosen for several reasons, some of which follow: First, the outstanding success that was made of slide films by the armed forces during the recent hostilities. Second, slide films afford an excellent opportunity to hold the action for any desired period. Third, numerous schools possess slide film equipment. Slide films have been used quite extensively in other phases of visual education other than athletics. Fourth, slide films can be produced

(continued on page 67)

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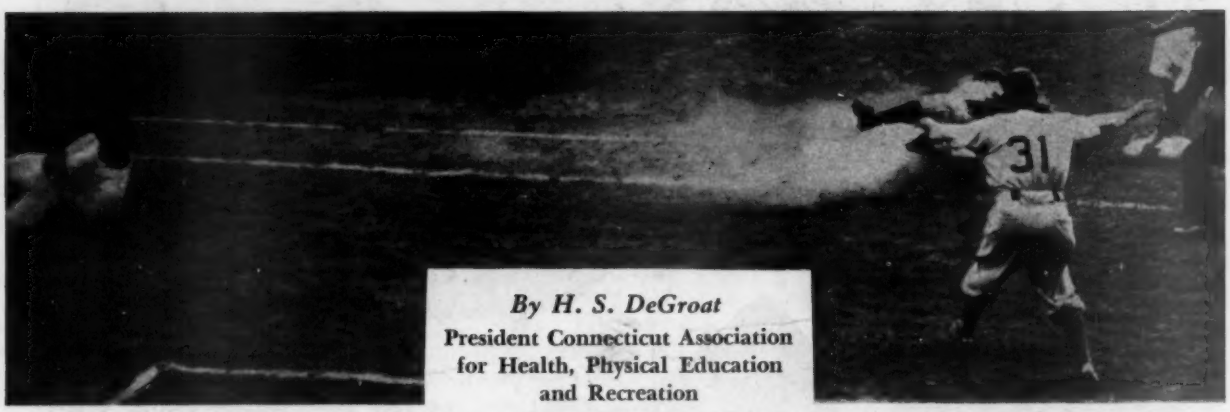
BASE-RUNNING



By H. S. DeGroat
President Connecticut Association for Health, Physical Education and Recreation

Pete Reiser sails into first on a long slide in the first game of last fall's classic. Note he starts slide almost ten feet from bag.

GOOD base-running ability is one of the most difficult baseball skills to teach. Consider the number of times a player gets aboard the base lines and then estimate how far the average runner goes after that and you can see that the opportunities to practice the art of base-running are much smaller than to bat or to field the ball.

Because it is so difficult and because the actual experiences in the game are so few, it is necessary to cover this part of our national game in careful detail in practice. Les Mann, who could circle the bases about as fast as any major leaguer, said that there are two skills in this area: "Circling the bases and the art of running the bases." The first is the art of running out a home run or a long hit that gives extra bases. The second is the art of advancing on the base lines base by base. Let's consider the first one.

When batting at the plate, have each batter on his final swing of his turn at hitting, run the bases properly all around over to third base. In the last times around at bat when time is getting short, allow each batter one swing and make him run to first base at full speed. He will learn to swing into it, get away fast and stay in the right line.

After hitting the ball, the runner should get up speed at once, and learn to look for the base line and not for the ball. When half way to first have him get in between the two lines, the three-foot line and the foul line and prepare to make his cut or swerve so he can hit the base and get into a direct line to second base as soon as possible. Have him start the cut *about twenty feet from first base* by pushing off to the right with the left foot while in stride.

Have him hit the center of the base with either foot. I like this best because it (1) does not break the stride. (2) assures hitting the bag and not missing it through trying for a corner, and (3) seldom causes the runner to stumble over the corner of the base.

The extra practice and high skill required to hit the inside corner of the base with the left foot at high speed is not worth the time spent on it. It does not balance the risk of missing the stride, stumbling over the base, or missing the corner entirely.

The important thing is to get on the base line leading to the next base with all the speed possible. This cut or swerve must be made at second base (and also at third if you are running out a homer) or any time you double the bases together. A runner who swings deep into the outfield because he fails to make these cuts is covering much extra distance. The proper cut at each base reduces the base line distance to the minimum.

Getting on First

Cross first base at full speed, then slow down gradually and come back.

Why have a three-foot line down that last forty-five feet of first base line on your field? It's there so the runner can use it. If he is not in it he may be called out for interference with the baseman's fielding attempt. Stay by the rules and you will have fewer troubles.

Should you slide into first base? Most coaches tell you that runners who stay on their feet and keep in stride cover the final distance faster than those who leap or throw themselves across the finish line.

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I hold to the general rule that running over the base is best.

But, to avoid collision with the baseman, sliding is sometimes a necessity. I teach my baseman to slide into the base for a put out. He, too, can avoid a collision with a runner and save them both from possible injury.

Some umpires seem to favor the baseman and not the runner who slides into first base on a close play.

How to Slide or to Hold Up

When the first baseman is pulled off the base by a poor throw and is between the runner and the base, it is proper to slide to first. Use a fall-away slide on the side away from the baseman and the ball.

It is poor baseball when a runner meekly runs into the ball in the first baseman's possession waiting in the base line and fails to try for a fall-away slide. It is even worse, when that runner runs in for an easy put-out and then allows the first baseman time to make a put-out of a team-mate trying to score from third on the play. In this situation some defenses are thrown off by heads-up baserunners who actually start back toward home to keep from being put out and thus *force* the baseman to make a decision either to return and step on the base for the put-out and let the runner score—or throw home and allow the batter to be safe at first.

Getting to Second Base

Many untrained youngsters take a lead off first base at a spot behind the direct line between first and second thinking that there is an advantage gained thereby. It is inadvisable and increases the distance to second base.

Each player should learn *his* exact safe distance off first. This distance should fit the right-handed pitcher situation and be adjusted when the left-handed hurler takes the mound. Next, know three things. (1) Know how to get back to first base without sliding. (2) Know how to slide back to first. (3) Know which of these two methods is the fastest for you and use it when needed.

For the proper stance take a safe distance off the base with your feet spread member that you stay on that bag until comfortably for a quick get-away. Reyou have your signal and until the pitcher steps on the rubber.

The proper footwork for going back to first base or to start toward second is the cross-over step. Note in the diagram that a half-step is saved by this method.

In running back to first, how does the runner strike the bag so as not to pull his foot off upon reaching it? The runner usually steps on the base with his right foot and then applies the brake by planting his left foot beyond the base in foul territory, thus leaving the right foot on the base and exposing only the calf of his leg to the swing of the baseman's hand as he tags him. Go straight across the bag and then apply the brake. Do not step diagonally to the left because you may pull your toe off the bag or fall. (See diagrams 3 and 4.)

As the pitcher throws, the runner moves toward second but is prepared to return if the batter refuses the pitch or if it is a pitch-out. If it is all right to go to second, the runner starts with the cross-over step and runs in a straight line.

Getting to Third Base

Play conservative baseball with a runner on second base for seldom does it pay to attempt to steal third base. The risk does not balance the fact that a runner is nearly as well off on second as when on third base. He can score on a hit. Here the runner should take a position in the base line just the right distance away so must be an alert thinker who thoroughly that he is safe if the pitcher turns to throw to second base. This style of baserunning gives the runner only one thing to do or to think about: watch the pitcher; if he turns to throw, go back. He need not care if the center fielder sneaks in and stands on the base nor if all three men stand there. He must go back only if the pitcher throws. He should be a safe distance from the base in case this occurs. It is no different than when off first base with the first baseman right there.

Using this style the runner is always ready to move toward third base on each pitch. He does not need to be nervous about being caught because he is too far off. He will not be caught going toward second on any pitch. He is now ready to take advantage of any development on each and every pitch.

If the runner breaks toward third and needs to slide, he should slide on the side away from the baseman and his ball hand. If the *head-on* is used it must be done correctly.

The Head-on Slide

This slide should be made from a single-foot take-off, or while in running stride; not a two-foot take-off and dive. The hands should strike first and several feet from the base. The wrists and forearms and then the elbows strike the ground. These break the impact of the body. The speed should carry the hands into the bag. The proper distance of the take-off is important for too close a take-off may result in sprained wrists as they contact the stationary bag.

Other Slides

All baserunners should have either a very good fall-away slide or a hook slide. The hook slide requires hitch-kicking the take-off foot and hooking the bag by the toe of the opposite foot. The fall-away slide uses the take-off foot to hook the bag while the other foot and the body sag away from the baseman's hand.

Baserunners who can learn the straight-on slide in which the extended right or left leg rides on the curled-under opposite leg and foot will find it very useful. This slide allows the runner to get away fast after arriving at the base, especially if the baseman misses the ball. It also allows the runner to arrive at the base in a standing position. The extended foot strikes the bag and then the pressure applied to the curled-under leg and foot brings the

H. S. DeGroat is no stranger to the baseball brethren, having written numerous articles on the sport as well as the popular "Baseball Coaching Kit." Formerly baseball coach at Springfield he is now in the Newtown, Connecticut, school system.

Pete Reiser sliding home on the pay-off end of a triple steal in game against the Phillies.

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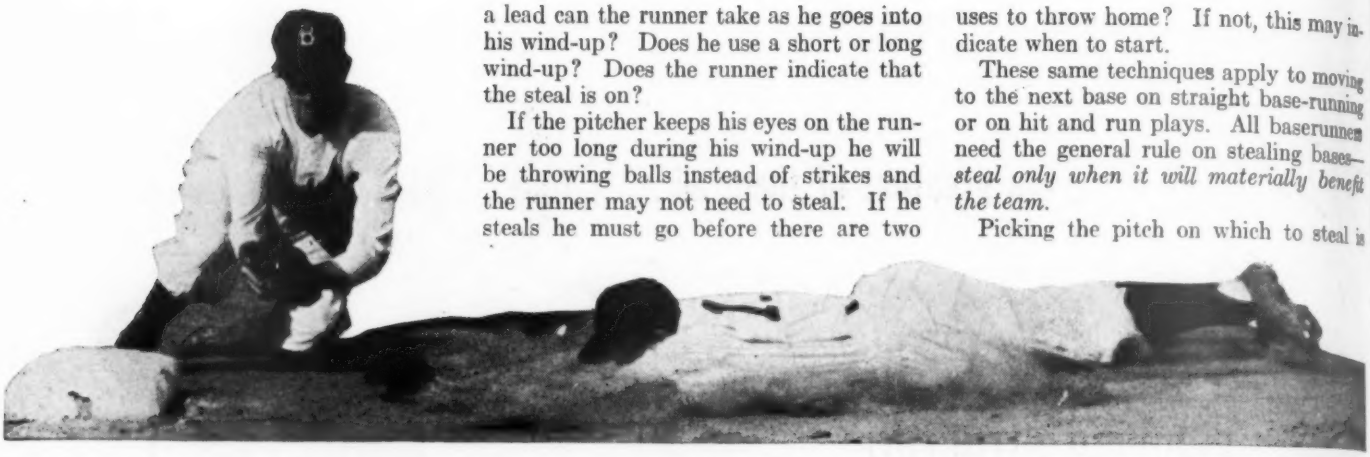

Pete Reiser sails into first on a long slide in the first game of last fall's classic. Note he starts slide almost ten feet from bag.

runner up to a standing position. The runner must learn to turn his feet so that his spikes will not dig into the dirt and also so they are not exposed to the baseman.

Off Third Base

Now we are at an interesting spot on the diamond. When the baserunner is in this scoring position he needs to know his baseball, inside baseball, some call it. Is it early game time? How many are out? Is it late innings and time to take a chance to win or is it time to be conservative?

The general rule for runners on third base is—Do not try to go home if there are less than two out unless the ball goes through the infield.

Off third base take a position *on foul territory* similar to that taken off first base and act about the same. It is dangerous to stand on fair territory as a sizzling grounder may interfere with the baserunner's returning to third or going home. When on third the baserunner usually stands on foul territory and returns to tag the base on fair territory. Toward home he stays on the outside of the foul line; going back to base he stays on the inside of it.

Action on Fly Balls

Some baserunners need to be trained to return to third and wait until fly balls are caught before they cut for home to score. Coaches often have the lazy player or the smart-Alec lad who does not tag up and delays his start for home by having to do so after the ball is caught. Tagging up is the usual procedure when a runner is at third and the fly ball, fair or foul is hit.

Base-Running Includes Stealing and Team Play

A baserunner who attempts to steal home must be speedy and intelligent. He must study the pitcher to find his weaknesses that apply to runners on third base. How long is his wind-up? When does he take his eyes off the runner? How long a lead can the runner take as he goes into his wind-up? Does he use a short or long wind-up? Does the runner indicate that the steal is on?

If the pitcher keeps his eyes on the runner too long during his wind-up he will be throwing balls instead of strikes and the runner may not need to steal. If he steals he must go before there are two strikes on the batter because that next pitch may be there for a third strike or the batter may have to swing and miss. You are stealing to save the run because the hitter is weak. Waiting too long will make the play useless.

Success in this baseball thriller depends upon getting a good lead, starting at the right time, and arriving at the plate when the catcher is off balance on receiving the pitch. The batter must get out of the catcher's way or he may be called out if there are two down. If less than two down in this case the runner is called out.

Techniques of Stealing and Base-running

Baserunners must learn some techniques of stealing and base-running if they are to be successful. The runner must take signals while standing on the base, not when off it.

It is proper to take a lead off base after the pitcher takes his place on the rubber with the ball in his hand.

If the runner hopes to steal second base he must have speed and craftiness. It is up to him to get his best lead off the base and he must not indicate his intention. If he jumps around and is noisy when not trying to steal but is very quiet when ready to steal the catcher may guess the play. Remember the catcher can see him. He can signal for a pitch-out and catch him cold if he tries to steal. Also, the old stunt of having the first baseman run in on the pitch as if preparing to field a bunt and have the second baseman sneak up and take the pitch-out throw from the catcher may work on him.

A baserunner should study the pitcher to see his faults or peculiarities. Does he always pitch on the same count after he places both hands on the ball? If he does the runner can get a good start on his delivery. If he varies his time of delivery he will be harder to steal against. Does he keep his eyes on the runner? If he looks and then turns away, just when can the runner make his break for the next base? If he is a left-hander, does he use the same leg kick to throw to first as he uses to throw home? If not, this may indicate when to start.

These same techniques apply to moving to the next base on straight base-running or on hit and run plays. All baserunners need the general rule on stealing bases—*steal only when it will materially benefit the team.*

Picking the pitch on which to steal is very important. The runner should never attempt to steal if he does not have the proper lead on any pitch. It is usually a sure out if the runner goes when not ready both mentally and physically. He should be confident of a fair chance of success. Many experienced pitchers and catchers try to learn the intention of the runner as they plan the first pitch to the new batter. The catcher can size up the runner easily.

The Double Delayed Steal of Second and Home Plates

The double delayed steal of second and home is a play that is hard to stop when properly used against the average team. Good base-running is essential here, however.

Let's consider the various conditions of this base-running technique. The following can happen. With a runner on third base and the batter drawing a walk, the batter trots down to first base and without stopping keeps right on toward second base. The pitcher being caught unawares throws to second to head him off, forgetting about the runner on third who has already made his break for home and an easy score. Often the second baseman and the short stop are caught napping on this one and it succeeds very often.

Now, suppose the runners are in place and the pitcher steps on the rubber. Which of these two methods should be attempted?

The usual type is where the runner on first goes down on the delivery, draws the throw to second and holds up so that the infielder will play on him if the runner at third failed to get away on the catcher's throw. This style requires the ball to travel from the catcher to second, perhaps at cut-off position, and back to home plate—two rather long throws Inaccuracy of either throw may mean the runners are safe. If the runner on third has the proper lead and is fast he will often score standing up. He scores on his surprise move and by choosing the right time for his get-away at third or perhaps on the inaccurate throw or throws that follow.

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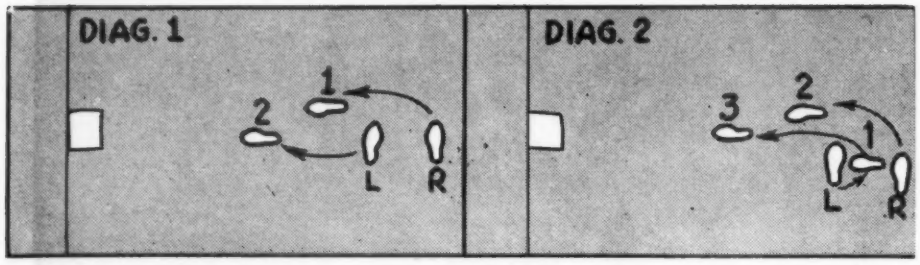


Diagram 1. Correct stance and cross-over step towards first base. Note that in two steps the runner has moved farther than the runner in Diagram 2 has moved in making three steps.
Diagram 2. The runner has used the right foot as a pivot and moved his left foot first.

If the catcher's throw is too high and the second baseman (in cut-off position) must go into the air to snag it, he may be off balance when he lands and makes his return throw to the catcher. If the defensive team is not using the cut-off style, the quick break by the runner on third may be more successful. If he does not make the quick break and waits for the playing of the runner from first base, his best time to break is when the first baseman or infielder nearest first makes his throw toward second because the ball must then go to second and then a long throw to home must follow.

Another play requires the runner on first to draw a throw to first base by the pitcher and work from there. This style of play has two advantages. If the baserunner starts early, many inexperienced pitchers will make their first step off the rubber towards first base and then when they see the runner is part way toward second they will hold up and throw to head him off. If the pitcher stepped directly towards first without first stepping back off the rubber, he can be called for balking. If he does throw, the first baseman must throw quickly to second to catch the runner. This is the important part for the runner, he must draw that throw. He must indicate enough speed to make him throw. As the ball leaves the first baseman's hand the runner off third must break. If he has his good lead and speed afoot he can make it. The ball must travel over eighty feet toward second and then the longer distance from there to home and the throws must be accurate. If the team is not well trained or the players above average in skill, the play will succeed.

I have had success with this play by adding one more base-running technique to be used with either of these styles of playing this steal. This technique is in fooling the catcher in his estimate of the runner's lead off third base. This requires a smart runner on third who does not give the play away by indicating nervousness. It starts this way:

The runner takes his usual lead on the third base line as the pitcher starts to deliver. When the pitcher starts his windup the runner takes a long cross-over step and hop up the base line but on the line itself toward home plate, thus getting another six- or seven-foot lead toward home plate. The catcher sees no movement nor is there any appearance of a change as he catches the pitch and sees the runner on first headed for second, so he throws to the cut-off man high enough for it to reach the bag if no cut-off is made. Then our man on third makes his bid for home as the ball leaves the catcher's hand. With a speedy runner we have repeatedly scored standing up.

If you look toward third base while acting as a catcher you will find that the runner off third does not appear to have any longer lead after his cross-step-hop than he had previously. There is an element of illusion here.

Naturally the smart catcher, who can sense that such a play is on, might bluff-peg toward second and then catch the runner off third.

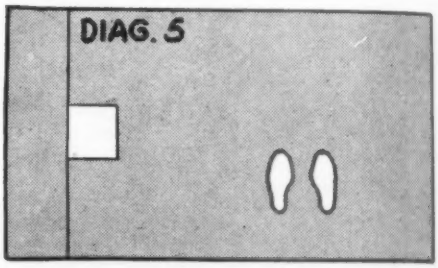
Running on the Hit and Run—Run and Hit—Squeeze

Base-running on the Hit-and-Run requires superior skill on the part of the runners. On the Hit-and-Run the runner must get the proper lead, not give away the play, start on the delivery, and then try to make the extra base or bases according to the hit. *If the ball is not hit he must steal.* Too often the runner fails to try to do his best and blames the batter for not connecting. He must steal if there is no connection. He must get back if it is a fly ball. If the ball is hit, the runner must look for the sign from the third base coach and act accordingly.

On the Run-and-Hit play the runner must be prepared to steal and then to run extra bases if the ball is hit as planned. In this play the batter hits only when the ball is in there for a strike. On the Hit-and-Run play the batter must swing regardless of the type of pitch. He has made a contract with the runner. He has actually said—"You run and I will hit the ball regardless of where it is." In the Run-and-Hit the batter has said, "You run and I will hit it if it is a good ball." In both cases the runners must prepare to see the coach, get up full speed, make the swerve at the near base if they are trying for the next one, and be prepared to slide or return to base according to what happens on the play.

On the Squeeze play the baserunner must be a keen ball player. He must not give the play away and must start at the right time if the play is to be successful. He must know which style of play the coach uses. Is it the whole hog—the style in which the runner comes all the way in and depends entirely upon the batter to lay the bunt safely, or does he use the other style in which the runner starts but does not break until the bunt is actually laid? This type draws the throw home and if the runner is safe the batter is also safe at first base. The other sacrifices the batter in nearly every case.

To be a good baserunner a ball player enjoys the game and is willing to think, see, and act properly.



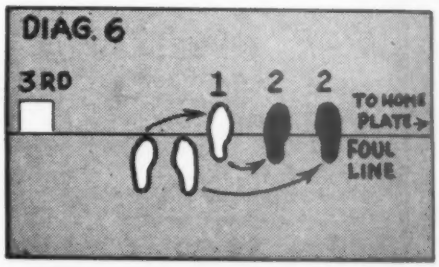
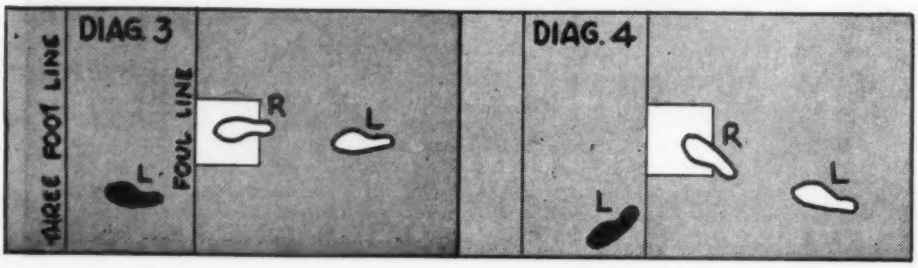


Diagram 5 shows the improper stance off first base. The feet are too close together, thus not permitting the quick get-away which the wider stance and cross-over step provide.
Diagram 6 shows the cross-over step and hop. The left foot moves to 1 and then both feet land at 2.

Diagram 3 shows the correct way to return to first. The right foot has hit the base while the left foot puts on the brake. Diagram 4 shows the incorrect method. The brake has been applied on the diagonal. This is not only unnecessary but is dangerous.



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IT'S Wilson TODAY IN SPORTS EQUIPMENT

Track and Field Records 1896-1946

By Frank C. Potts,

Track Coach, University of Colorado

THE OLYMPIC games are scheduled for this year in London with the result that interest in the boys who run, jump and throw is booming throughout the United States. Every athlete who performed well during 1947 is looked upon as an Olympic prospect and, indeed he should be.

The increased interest in the track and field events, both intercollegiate and interscholastic, has resulted in larger crowds, better performances and the natural inclination to make the United States the favorite to again win in this division of the Olympics.

The record book reveals interesting facts concerning the sport fifty years ago as compared with the sport as we know it today. Track and field athletics received a shot in the arm in 1896 with the revival of the Olympic games by a great organizer and sports enthusiast, Baron de Coubertin of France. He arranged a meeting of representatives from all nations interested in international competition and this group inaugurated the modern Olympics in Athens, Greece, where the tracks of the last participants in the ancient games had been made 1500 years before.

This was the stimulus that started a new era in track and field. With the incentive of possible membership on the U. S. Olympic team, our athletes began breaking records right and left and, prior to 1936 when the last Olympic meeting took place, few records in either colleges or high schools stood for long. No games were held in 1940 and 1944 because most of the world's young men were engaged in a more lethal occupation, but the summer of 1948 will see the Olympic torch burning once more. A renewal of interest and effort is much in evidence among college men.

There is quite a large gap, in both time and distance, between the records of fifty years ago and those of the present. The interscholastic records are better now than the intercollegiate marks were then. An interesting side light on the comparison is that champions around the turn of the century were almost all from the New England states in both high school and college competition. Present record holders represent a cross section of the U. S. A., which indicates that interest in the sport is keen throughout the country.

Sport Has Changed Very Little

The program of events at track meets has changed very little through the years.

FRANK C. POTTS has coached track at Colorado University since 1927 and during that time his teams have won ten consecutive track championships in the Mountain States Conference. He was president of the National Collegiate Track Coaches Association in '46-'47 and has promoted both the Colorado Relays and the Colorado Invitational Indoor. He will referee the Kansas Relays this year.

The hammer throw was once a popular event in both high schools and colleges but it has been discontinued by all but the colleges of the New England and Rocky Mountain states. The discus throw has replaced the hammer throw in most schools. The javelin throw has come and gone in the high schools but remains on the program of events in most colleges. Three inches have been lopped off the height of the high hurdles for high school use. Low hurdles in high school now run twenty yards less than what they once did and the hurdles are eighteen yards apart instead of twenty. The running and jumping events have remained unchanged.

Why are the records so much better now than they were fifty years ago? One might

(*continued on page* 64)

Following is a comparison of records in 1896 and in 1946.

Event	1896 Held by	1896 School	1896 Mark	1946 Held by	1946 School	1946 Mark
Intercollegiate						
100 Yds.	L. Cary	Princeton	10.0	Simpson	Ohio State	9.4
				Meier	Iowa State	
				Wykoff	So. Calif.	
				Metcalf	Marquette	
				Owens	Ohio State	
				Jeffrey	Stanford	
				Davis	Calif.	
220 Yds.	L. Cary	Princeton	22.8	Owens	Ohio State	20.3
440 Yds.	W. Baker	Harvard	47.75	Klemmer	California	46.4
880 Yds.	W. Duhn	Princeton	1:57.2	Burrows	Princeton	1:49.9
One Mile	G. Orton	Penn.	4:23.4	Cunningham	Kansas	4:06.7
Two Mile				Rice	Notre Dame	9:02.6
120 Yd. H.H.	H. Williams	Yale	15.8	Wolcott	Rice	13.7
220 Yd. L.H.	J. Bremer	Harvard	24.6	Owens	Ohio State	22.6
High J.	G. Fearing	Harvard	6′1½″	Steers	Oregon	6′11″
Broad J.	V. Mapes	Columbia	22′11¼″	Owens	Ohio State	26′8¼″
Pole V.	C. Buckholz	Penn.	11′2¾″	Meadows	So. Calif.	14′11″
	W. Hoyt	Harvard	11′2¾″	Sefton	So. Calif.	14′11″
16-lb. Shot	W. Hickok	Yale	42′11½″	Blozis	Georgetown	56′½″
Discus				Harris	Indiana	174′8¾″
Javelin				Peoples	So. Calif.	234′3½″

Note—The following marks registered at Salt Lake City, Utah during the N.C.A.A. championships, June 1947, bettered or tied the Intercollegiate records.

100 Yds. —Patton—Southern Calif... 9.4 Sec.
220 Yds. L.H.—Dillard—Baldwin Wallace.22.3 Sec.
440 Yds. —McKinley-Illinois.....46.2 Sec.

The following mark was made at the Spartan Relays in February, 1948:
16-lb. Shot—Charles Fonville—Michigan, 56′6½″.

Event	1896 Held by	1896 School	1896 Mark	1946 Held by	1946 School	1946 Mark
Interscholastic						
100 Yds.	F. Biglow	Worcester	10.2	J. Owens	Cleveland, O.	9.4
220 Yds.	F. Biglow	Worcester	22.4	J. Owens	Cleveland, O.	20.7
*440 Yds.	T. Burke	Boston	50.6	F. Sloman	San Francisco	48.2
880 Yds.	J. Meehan	Condon, N.Y.	2:04.2	R. Bush	Dallas, Tex.	1:54.4
One Mile	W. Lain	Andover	4:34.4	L. Zamperini	Torrance, Cal.	4:21.2
120 Yd. H.H.	E. Perkins	Hartford	17.0	*J. Batiste	Tucson, Ariz.	14.0
220 Yd. L.H.	Field	Hartford	26.5	**Smith	DesPlaines, Ill.	21.9
High Jump	Ballazzi	Harvard, N. Y.	5′11″	G. LaCava	Beverly Hills	6′7.8″
Broad J.	Cheek	Oakland, Cal.	21′7″	J. Owens	Cleveland, O.	24′11¼″
Pole V.	B. Johnson	Worcester	10′7″	J. Linta	Mansfield, O.	13′9.8″
12-lb. Shot	Ayres	Condon, N.Y.	40′¾″	J. Helwig	Compton, Cal.	59′5⅞″
Discus				***H. Debus	Lincoln, Neb.	174′2½″
Javelin				R. Peoples	Okla. City, Okla.	219′
*440 Yds.				H. Moxley	Columbus, O.	48.2

*— 39-Inch Hurdle
**—200 Yd. Low Hurdles
***—3-Lb. 9-Oz. Discus

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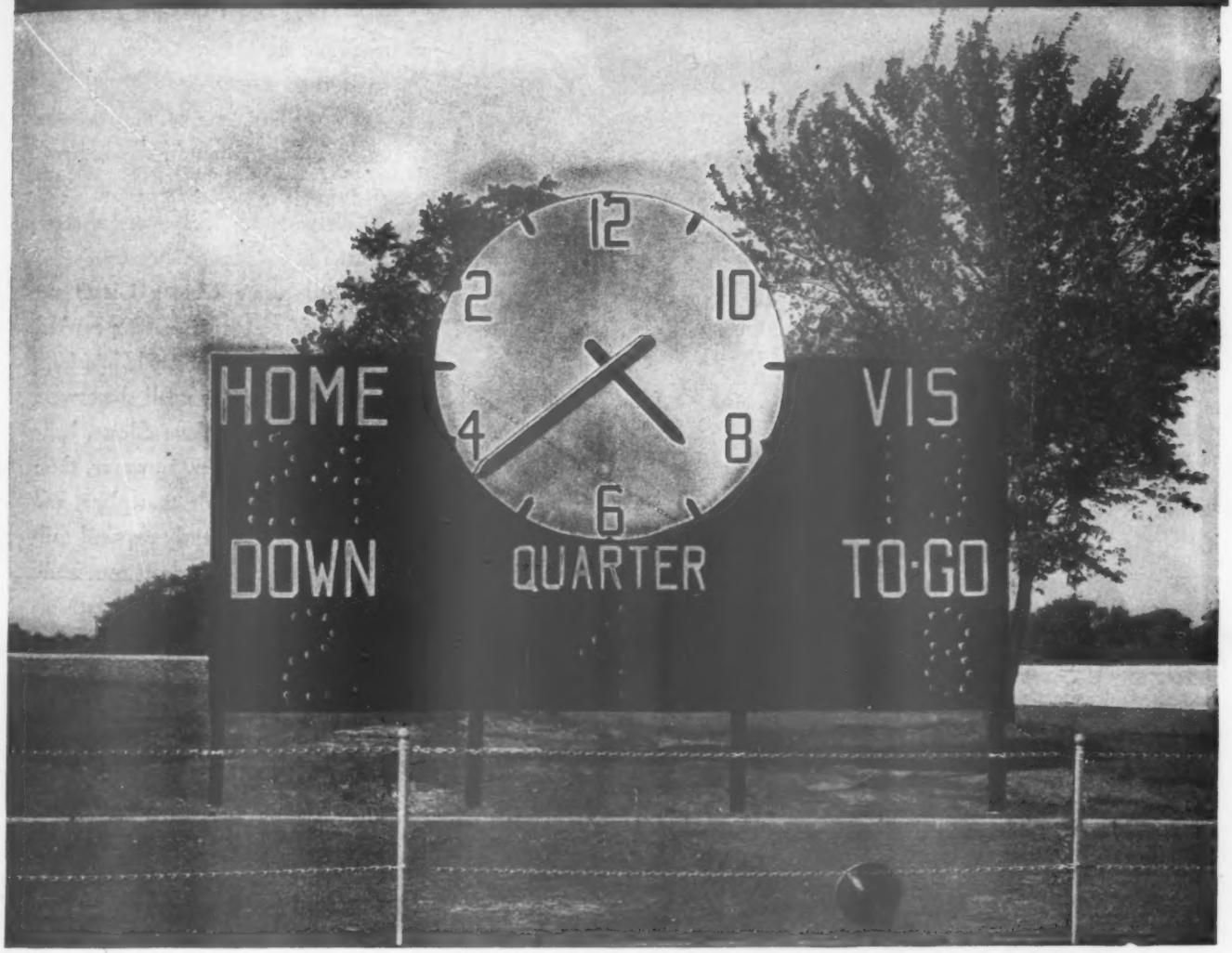

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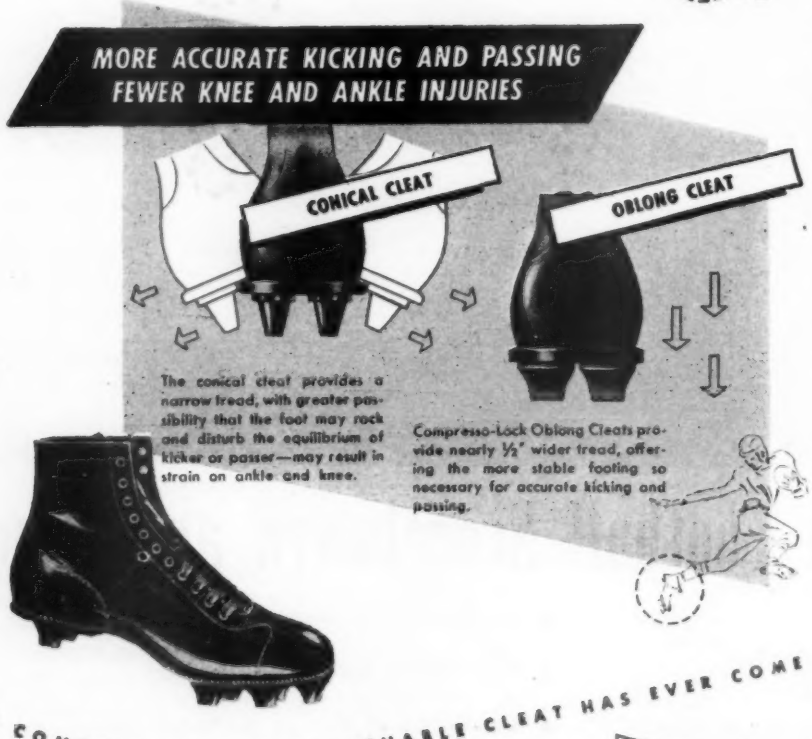
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● *This is the third of a series of informative advertisements.*

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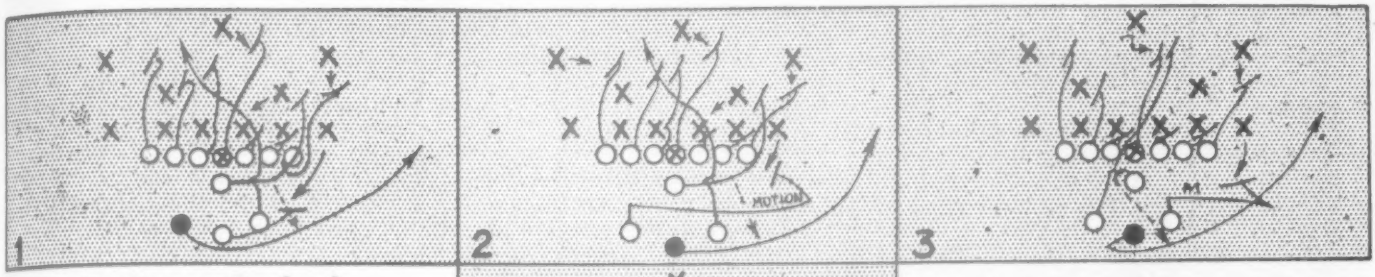
Running The Ends In The



By Forrest England

Football Coach

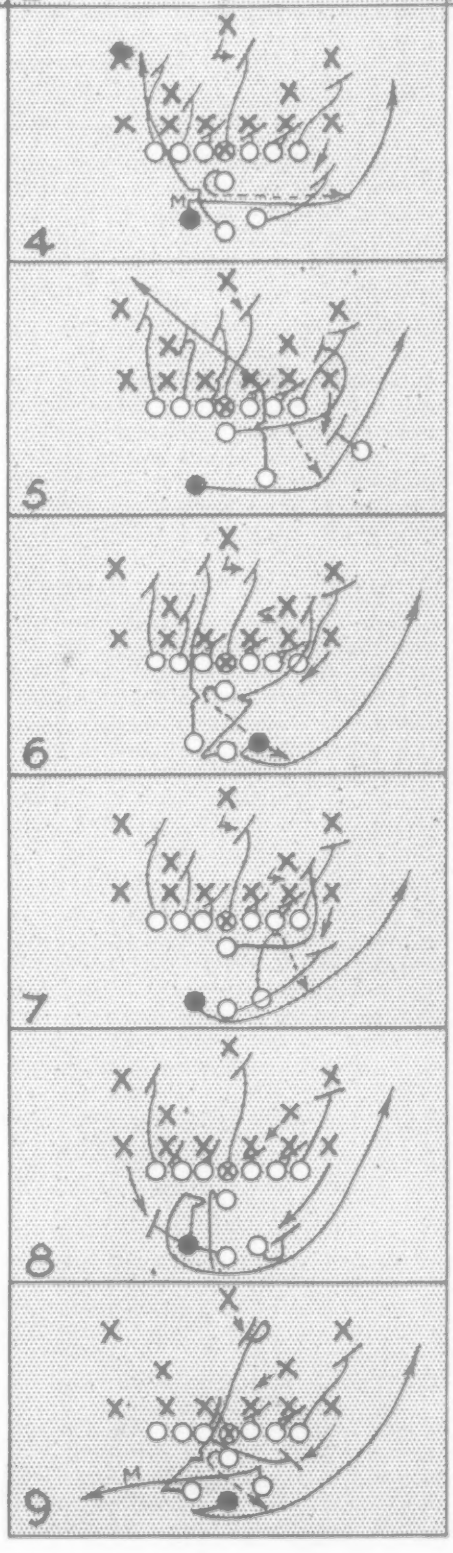
Arkansas State College

MANY "doubting Thomases" still maintain that the T formation is weak as an offense for making "wide stuff" an effective part of the offense.

The type of end run that will succeed depends upon two factors—(1) the individual defensive tactics used by the defensive end (2) the pattern of defensive play employed by the defensive team. We all recognize, of course, that a huge amount of the end run's success will be governed by the deception of the play, the speed with which the team moves and the viciousness of the blockers.

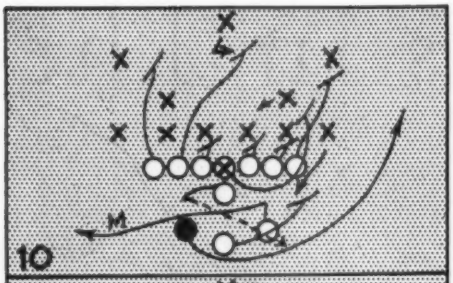
About 1930 Ralph Jones loosened the halves and split the ends from the old-fashioned T that had been discarded because of its notorious weaknesses as an attack to get outside the defensive ends. This change spread the defensive line and tremendously aided the effectiveness of the quick openers that were now basic. Even with these changes by Jones the territory outside the defensive ends was still difficult to navigate, possibly more so, since the ends were now spread farther than ever. To overcome this glaring weakness the "man-in-motion" was incorporated into the T. This philosophy was carried to Gibraltar-like strength by the Bears of George Halas. With his quarterback's reverse pivots and constant fading back as a passing threat, the man-in-motion was the only answer. Really the T was now unbalanced and the man-in-motion was a flanker. Guards were still commonly pulled out and around on wide plays.

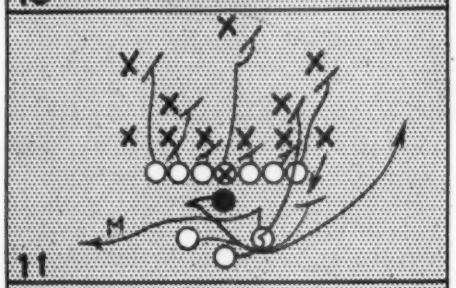
About seven years ago there developed a movement, led by Don Faurot, to split the whole offensive line and no longer reverse pivot the quarterback or keep him fading from the line primarily as a passing threat. He came up with a basic three-play offense that gave rise to a new method of traveling that precious territory around the defensive ends. The basic change in his backfield play was that the quarterback, on each play, served primarily as a running or blocking threat and

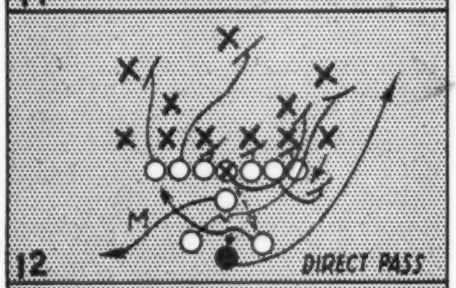


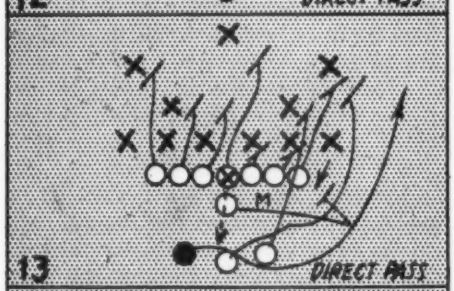
secondarily as a passing threat. The quarterback now traveled chiefly on "East and West street," an area not more than one yard from the line of scrimmage and parallel to it. Remember, the Bear style of play had the quarterback traveling chiefly on "North and South street" which kept him moving farther and farther out of the play, but threatening constantly to pass. Now the defensive end was faced with a tantalizing situation of whether to attempt to tackle the quarterback who had the ball and was moving in the off-tackle hole or to go for the far-side halfback who was coming to his outside and threatening at any moment to take a pitch-out from the quarterback. While the end had this problem on his mind he was being contacted in no uncertain terms by the offensive fullback who happens to be this team's best blocker. Really this method closely resembles an old "two on one" set-up in basketball except that it should be easier since the offense has the aid of a blocker to make for still greater pressure on the defensive end. In using this style of T play I now instruct our fullback to block the defensive end only if he is in the area over a certain spot. If he is not there the fullback leads the play and will block the line-backer (providing the line-backer has not been held out of the play by the threat of the quick opener) or the strong-side defensive halfback. This style of running the ends from the T seldom finds guards being pulled out and around. Though often we will not need to block the defensive end, we must always block the defensive strong-side tackle. The man-in-motion often does not need to block the strong-side defensive tackle. This will all depend upon whether or not your quarterback is traveling on "East and West street" or on "North and South street."

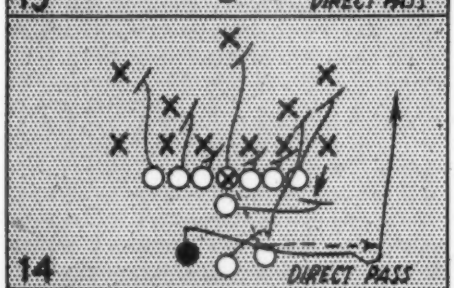
It was this latter type Faurot philosophy that I latched on to back in 1942. Today I find myself mixing T philosophies, but I still do not believe that one who is first making use of the T formation can teach it satisfactorily until he settles upon the T formation philosophy that he wants to make basic and explores it fully. He is likely to find that it takes three or four years to even scratch the surface of either major philosophy. Whereas three or four years ago everything in my T thinking

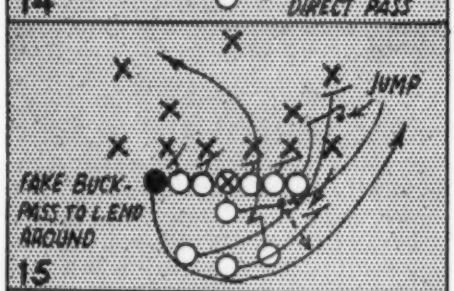


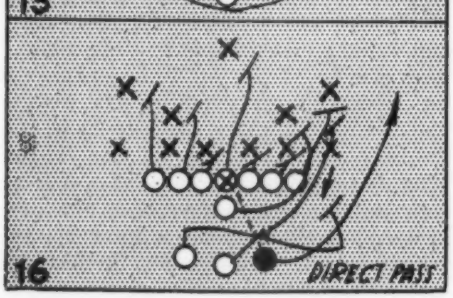


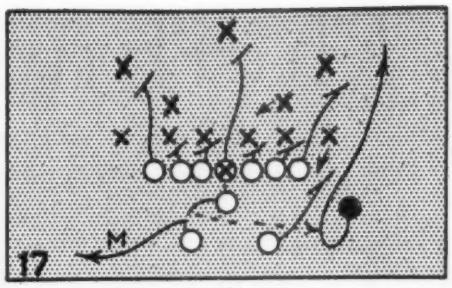










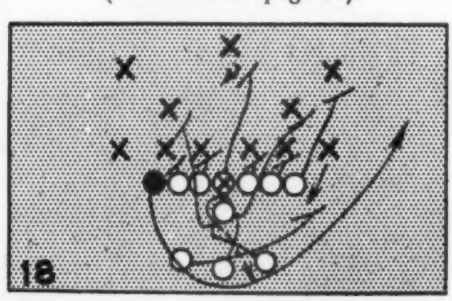


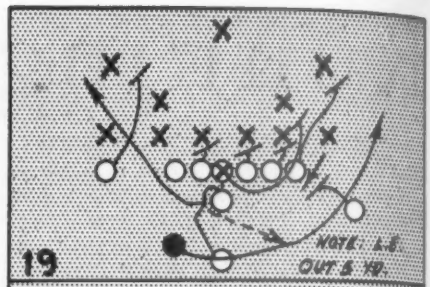
FORREST W. ENGLAND is one of the country's leading exponents of the T formation and has lectured on it at many coaching clinics. He was formerly football coach at the Senior High School at University City, Missouri. Since going to Arkansas State his teams have lost but five out of nineteen games.

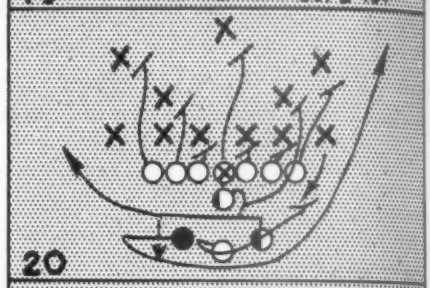
had to include the threat of the quick opener, I now find I like to use several types of delayed plays from the T. The experience possessed by your quarterbacks will dictate considerably the degree to which you mix T formation philosophies. You may think that I have strayed far from my "Maneuvers from the T for Running the Ends," but an explanation such as I have made was necessary before peeping at the mixed philosophies I have employed in the maneuvers we use for getting outside.

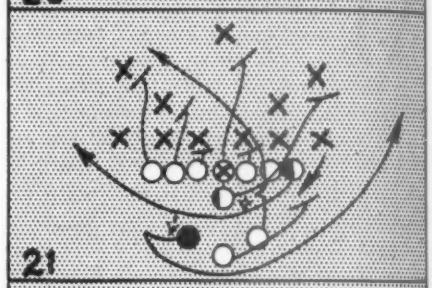
Many times we set a flanker outside, other times we send the far halfback in motion, on other plays we have our near halfback in motion. Always our man-in-motion is side-stepping or gliding and dipping back so as to keep him a constant threat as a logical target for quick passes to him. I have found that the man-in-motion who does not dip back can seldom be used as a target for quick passes in the flat area back of his own line of scrimmage. The angle is too difficult and hazardous. We like to make our man-in-motion plays "talking plays." When doing this the man-in-motion yells as he sees the defense adjust "keep it, give it, pitch it." In fact, we have wide plays where at some time or other every member of the backfield goes in motion. Even further, we have plays where we use the man-in-motion and the "two on one" situation at one and the same time in attempting to get around the end. We also make use of direct passes to one of the three deep backs. I have noticed a trend during the last season to do considerable end-running from the T with such direct passes.

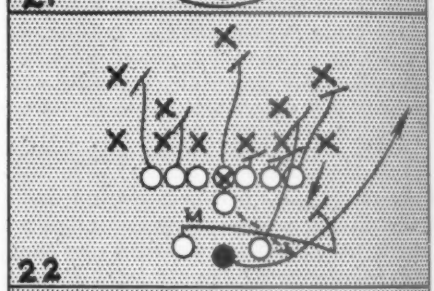
(*continued on page* 56)

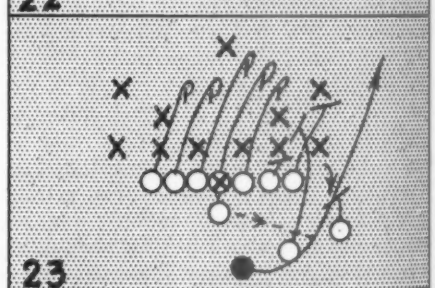


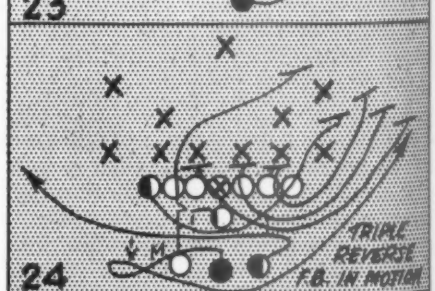


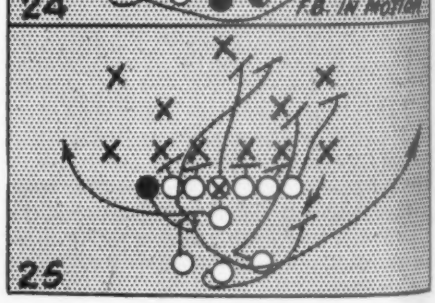












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Tennis Fundamentals

By Vincent Richards

ONE of the difficulties today with the younger tennis players throughout the country, is that they will not put in sufficient time practicing. I speak from experience as the father of two boys and a girl. They expect to pick up a racket and go right out into big-time tournament tennis. This obviously cannot be done, and what they should do after they have learned the fundamental strokes of the game, is to get against a brick wall or a backstop and practice those strokes before going into tournament play. That seems to be a drudgery which most youngsters hate these days. There is no mystery about tennis. Likewise, there is no royal road to success in the game. If you want to play well, you must work, and work hard at it.

To simplify this article, I will deal with only the—

1. Service
2. Forehand Drive
3. Backhand Drive
4. Overhand Volley
5. Overhand Smash
6. Backhand Volley
7. Backhand Slice

Anyone who masters these seven strokes in tennis should have the fundamentals of the game down to such an extent that he not only plays good Club tennis but can hold his own in tournament play.

In starting with the Service, remember it is the opening gun of play. The three most popular variations of the American Twist Service are—the Cannonball, the Twist and the Slice . . . all hit from exactly the same body position.

The player places his left foot six inches behind the service line to avoid committing a foot fault. The left shoulder is toward the net; the weight of the body on the left foot.

The racket swings back and the body weight flows from the left to the right foot. As the racket reaches waist height on the back swing, the ball is tossed about five feet in the air slightly to the right of the head and directly over the baseline.

The eye should follow the ball at all times. A good player sees the ball hit the racket. Avoid going to tiptoes to reach the ball as this will throw you off balance.

The racket comes forward and hits the ball at the peak of the throw. The weight now flowing from the right foot to the left. The racket strikes the ball on the back outside and slightly on top.

The racket then continues on down and follows through naturally to the left side of the body. For added control on the second serve, hit the ball less on the back and more on the outside and the top, creating a curve similar to the "outdrop" of a pitcher.

Forehand Drive—The body details in important. Good stroking is impossible without proper timing, and proper timing is the result of correct footwork and balance.

To insure correct footing, the body must be "squared around" to the right, and the shoulders brought into a line parallel to the alley lines. The racket is taken back and the body weight flows from the left to the right foot. Notice that the head of the racket is up. Eyes should be glued to the oncoming ball.

The back swing must be started while the opponent's return is still in the air. Your opponent's shot must never be allowed to bounce on your side of the court before you have prepared your back swing.

The racket is brought forward and gathers momentum until it strikes the ball, at which time the weight of the body flows from the right to the left foot. The racket contacts the ball from the back slightly on the outside top.

The ball is hit at a point opposite the belt buckle. The upward part of the body is tipped forward slightly. At the moment of impact the wrist turns the head of the racket over into an almost flat position, so that just enough topspin is imparted to the ball to keep a ten-inch clearance of the net.

At the finish of the stroke, the weight is on the left foot and the arms are crossed for balance. The follow-through is allowed to extend naturally in the direction of the shot.

Forearm Volley—The player should have two types of forearm volley at his command; the chop volley for handling shoulder-high balls and the flat volley for those below his shoulder.

The most desirable court position for a net player is a little forward of halfway between the service line and the net. The stance is similar to the forearm drive—shoulders "squared around" and brought in to a line parallel with the alley lines. The body is tipped forward more and the ball is hit slightly in advance of the left foot.

Most volleys will have to be taken net-high or below. These low flat volleys must be blocked, not stroked. Little follow-through is needed but a firm wrist action and a slight tilting of the racket head upward are essential to help the ball up over the net.

Notice in the volley that the ball should be hit net-high and the right shoulder is put well behind the shot to insure a crisp volley. The body is bent well forward to get the best possible perspective of the ball. See the ball hit the strings.

At the moment the racket meets the ball a snap of the wrist will impart the necessary spin for proper control. At this point the weight flows from the right to the left foot. Remember—hard hitting at the net will never win more points than well-placed returns to openings in your opponent's court.

At the conclusion of the stroke the weight is on the left foot and the arms are crossed for balance just as in the case of the forearm drive. The chop volley uses the same grip and stance as the service, but the racket is drawn across the ball with enough spin imparted to the ball to gain control.

Overhead Smash—There are two variations of the overhead smash; one, when the player takes the ball right out of the air; two, when the player allows the ball to bounce before stroking it.

The mechanics of both smashes are exactly the same and follow closely the stance and footwork of the service with the left shoulder toward the net. Weight of the body starts on the left foot and flows to the right foot with the backswing. The important thing to remember is to keep the ball in front of you.

The ball should be taken about the same height in the air as you hit your service, and a little to the right of the head. At the moment of impact the weight travels from the right foot to the left foot.

However, effective overhead smashing depends upon the depth of the smash or the sharpness of the angle, and not on sheer speed with no thought as to placement. Accurate placing is only possible when you keep your eye on the ball. See it hit the strings.

The momentum of the smash naturally carries the player forward into the court in perfect position for another effort at a "kill" if the opponent should return the first.

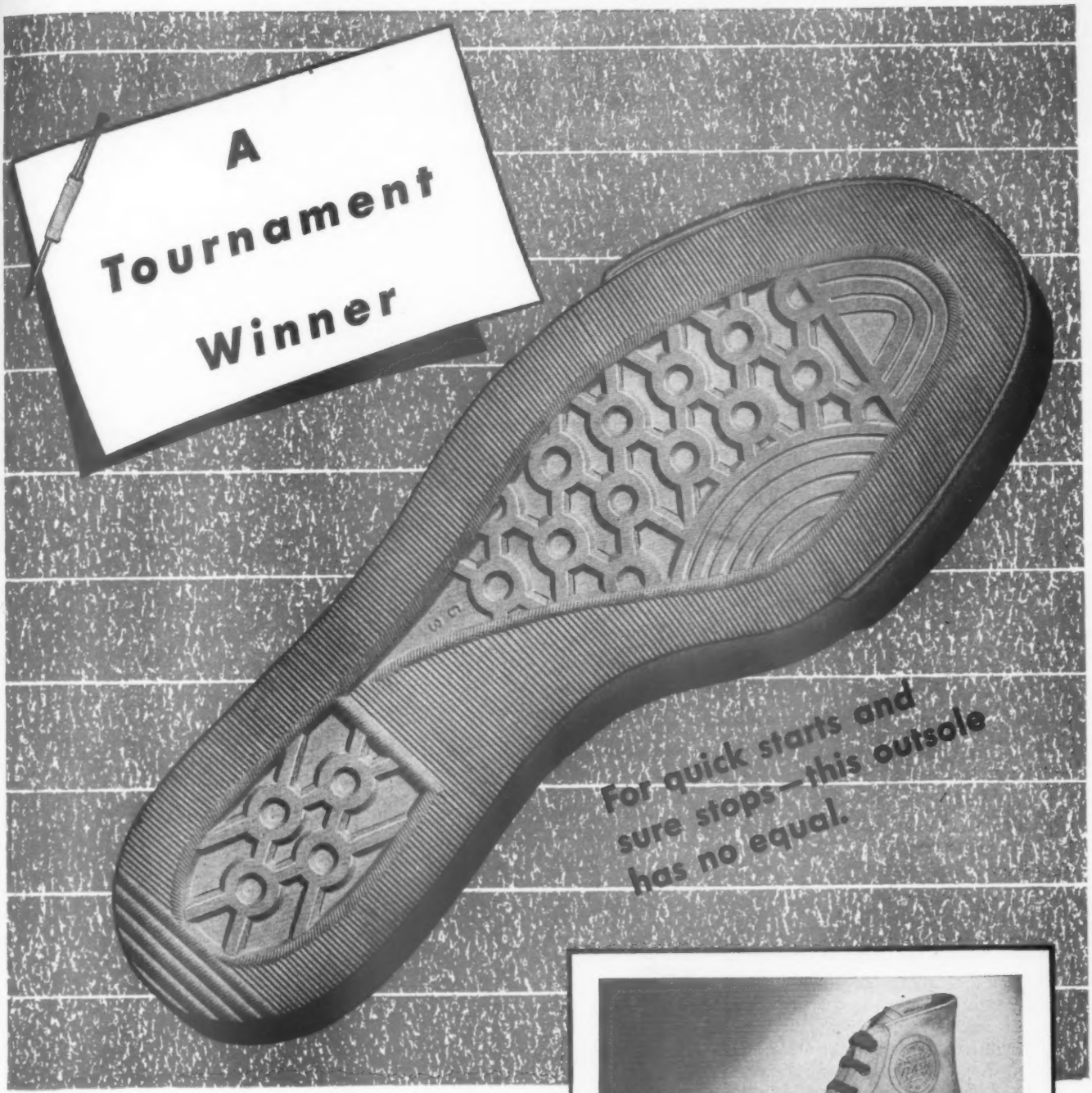
Backhand Volley—The position for the backhand volley is similar to the backhand drive except that the player stands slightly in advance of halfway between the net and service line.

The weight of the body is on the right foot. The right shoulder is toward the

(*continued on page* 57)

VINCENT RICHARDS is a name familiar to all tennis enthusiasts. His record as World's Professional Singles champion for four years—1927, '28, '30 and '33—has not yet been equalled. Karel Kozeluh, the Czech, came closest, having won this title three times. Richards also holds the National Professional Doubles championship for 1937, '38 and '45.

A Tournament Winner



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A Test of National Cultures

By Albert Lumley
Track Coach, Amherst College

THE ancient Olympic Games were founded at Olympia in 776 B.C. At first they consisted of only one 200-yard foot race but other events were quickly added. Early champions were crowned with an olive wreath and on returning home found that the assembled multitude had breached their walled town to do them special honor. They were now considered God-like in form and character and also in special favor with the Gods.

These games were held every four years for over a thousand years without interruption. It would be very interesting to know how the ancients were able to stop their wars, discourage their highwaymen and control the ambitions of their politicians. Perhaps it was because the games soon became religious festivals held in honor of he Greek Gods, while all the time retaining their athletic flavor.

The athletes were required to report to the elders of Athens and train under their watchful eyes for one moon preceding the games. They were also required to sign a statement that they were full-born Greeks, that they had trained for a year and that they did not have bad thoughts of the Gods or of their fellow men.

The training seems to have been of a rigorous physical nature with considerable time spent appeasing the Gods by means of sacrifices and keeping in the good graces of the elders of Athens. The training meals consisted of plenty of cheese and some fruit, with water as the only beverage. It is impossible to compare the physical condition of the ancient athletes with our moderns as to speed, endurance and technical proficiency. Stop watches and steel tapes were, of course, unknown, but the ancient Greeks were past masters in the judgment of form and selected their Olympic champions with a great deal of emphasis on the form and method of winning and not just on the technical time or distance as we do today.

I am convinced that the ancient athletes were over-worked, muscle-bound and poorly trained by the politicians of Athens. It is obvious that they did not have good coaches, good equipment, adequate training facilities or a balanced diet. The athletes seem to have made up for this lack of good conditioning by rigorous training and a strong moral concept of being one with the Gods.

A religious concept closely related to a physical and moral conception of man continued to dominate the ancient Greeks until they fell under the political dominance of the Roman Empire. From that time on professionalism in all its forms gradually took over these games. They lost their religious significance and were called routs and circuses. From them we get the modern meaningful term, "A Roman Holiday." These ancient games were dying a lingering death through the third and fourth centuries when they were finally stopped by official decree of the Roman Emperor, Theodosius I, in 394 A.D.

After fourteen centuries the modern Olympic games were revived at Athens in 1896 through the life long work of a French political scientist and idealist, Baron Pierre de Coubertin. George Averoff of Alexandria gave financial aid and King George I of Greece gave moral and political support to the movement, presiding over the opening of the games and inviting the world to compete with Greece on the Olympic field. Baron de Coubertin had been successful in convincing most of the civilized world that they would foster international good will and might function as a deterrent to war. We have now conducted eleven modern Olympic Games but, unlike the ancient Greek civilization,

(*continued on page* 46)

ALBERT LUMLEY is professor of physical education and director of intramural athletics in addition to being head coach of track and cross country. He has a master's degree from Oberlin College and is president of the Michigan Normal Track club. During the war he served as chief of reconditioning for the Third Service Command and in the Asiatic Pacific theatre at Manila.

NATIONAL OLYMPIC CHAMPIONSHIPS MENS TRACK AND FIELD 1896–1946	U.S.A.	FINLAND	BRITAIN	SWEDEN	CANADA	IRELAND	S. AFRICA	FRANCE	JAPAN	GERMANY	N. ZEALAND	POLAND	GREECE	ARGENTINE	AUSTRALIA	NORWAY	HUNGARY	TOTAL
100 METRES	8		1		1		1											11
200 METRES	7				2													9
400 METRES	8		2				1											11
800 METRES	5		6															11
1,500 METRES	3	2	4			1					1							11
5,000 METRES		5						1										6
10,000 METRES		5										1						6
MARATHON	2	2			1		1	2	1				1	1				11
110 M. HURDLES	9				1		1											11
400 M. HURDLES	6		1			1												8
3,000 M. STEEPLE CHASE		4	1															5
50,000 M. WALK			2															2
400 M. RELAY	5		1															6
1,600 M. RELAY	5		2															7
HIGH JUMP	9				1	1												11
POLE VAULT	10							1										11
BROAD JUMP	10			1														11
HOP STEP & JUMP	3	1	1	1		1			3						1			11
16 LB. SHOT PUT	9	1								1								11
DISCUS	8	2															1	11
HAMMER	6					2				1								9
JAVELIN		3		4						1								8
DECATHLON	3	1		1												1		6
TOTAL	116	26	21	7	6	6	4	4	4	3	1	1	1	1	1	1	1	204

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Starter Versus Pistol Firer

By Larry Snyder

Track Coach, Ohio State University, Columbus, Ohio

A HALF century ago the man with the pistol who had full authority to start a race was called the Pistol Firer. His job was then and is now, the most important officiating position of all. Any of the old professional runners that are still living could tell us whether he was a real Starter but none have done so. Perhaps all he did was fire the gun after the runners started. Since betting was the prime motive of professional running, however, it seems likely that the Pistol Firer actually controlled the start of the race; that he waited with the runners in "SET" position until every man was dead still, then waited a little longer before he pressed the trigger.

In recent years the man with the pistol, the bright red cap and full authority to start the race, is called the Starter. In this article the word Starter will imply expert ability to start a race; the term Pistol Firer will be used to indicate that such an official is not competent to start races where boys or men who have been trained to race are competing. If the gun-wielder is a Starter, he controls the start of each race and he insures every runner a fair and even start. If this official is a Pistol Firer, the athletes will start to run when one or more of them decide to do so and the Pistol Firer will jerk the trigger to let the timers and judges know the boys are coming.

Since most Starters are paid for their services it behooves track coaches to see that this official is competent. Many college and high school coaches give their sprinters practice starts year after year without checking the time interval between "Get Set" and the crack of the gun. Hold the stop watch on yourself to discover just how long a two-second interval is. For the coach or Pistol Firer who has paid no attention to this rule the interval will seem like eternity, just as it will to the boy who has become used to "Take Your Marks"—"Get Set"—Bang.

In the United States there is barely a handful of officials who can qualify as Starters. Another small handful qualify for all but Championship Meets, while the remainder, perhaps thousands, are merely men with a gun and a desire to fire it as soon after the "Get Set" as their reactions will allow. It is this great group of Pistol Firers who year after year are responsible for hundreds of boys running "Ten Flat" hundred yard dashes, boys who do not have the speed to run faster than 10.3 and who wonder where their speed went when they get to the State Meet and do not qualify for the final in a preliminary heat is timed in 10.2 or 10.3. No matter how quick the Pistol Firer pulls the trigger the runners are already on their way. They know he is rattled and they take full advantage of that fact.

***LARRY SNYDER** is credited with having trained present-day record holders in four events. Simpson and Owens' 9.4 in the 100; Owens' 20.3 in the 220; Owens' 26 feet, 8¼ inches in the broad jump; Albritton and Walkers' 6 feet, 9¾ inches in the high jump. In the accompanying article Snyder differentiates between good and bad track starters.*

Let's scan the rules:

• RULE 20—STARTING SIGNAL—All races, except time handicaps and cross-country runs, shall be started by the report of a pistol to be fired so that its flash shall be visible to the Timekeepers. A snapped cap shall be no start. In case of an unfair start, the Starter shall recall the runners by a second pistol shot. The Starter shall not discharge the pistol while any competitor is in motion after the order is given to "Get set." Time handicaps and cross-country runs may be started by the word "Go."

RULE 21—STARTING—When the Starter receives the signal from the Head Finish Judge that everything is in readiness, he shall direct the competitors to "Get on your marks." After allowing ample time for them to do so, he shall then instruct them to "Get set." Then, after an interval of at least two seconds, and when all are set and motionless, he shall discharge the pistol. If any portion of the body of a competitor touches the starting line or the ground in front of the line before the pistol is fired, it shall be considered a false start. The Starter shall warn the offender and shall disqualify at the second false start. If, however, the Starter fires the pistol and then recalls the runners no penalty shall be inflicted.

Suggestion—The Starter should use a gun which can be cocked. When the Starter sees that the men on the marks are nervous and unsteady he should call them and attempt to steady them. However, if he gives the command "Get Set" and any competitor breaks before the Starter can call him up or can shoot the gun, the official has no alternative but to charge this offense as one break. If he does not do this he is not fair to the competitors who have held their marks.

The Starter usually finds it necessary to penalize only one man for a false start. By saying "stand up" quickly as soon as any competitor has broken, the Starter can usually save from penalty all runners who may be led off by the one who makes the false start. In the event two or more men break simultaneously the Starter has no alternative but to penalize all of them.

The digging of holes except at the start of the straightaway shall be discouraged.

The Rules Committee recommends that in case a competitor pursues tactics at the start of a race which are obviously for the purpose of disconcerting an opponent, the Starter shall warn such competitor and if repeated shall disqualify him as though he had made a false start.

Questions and Answers on the Rules

RULE 20: Question—May the contestants in a race be recalled after Starter's gun has been fired?

Answer—Yes. If in the opinion of the Starter a false start has been made, he may recall the competitors by a second pistol shot. From a theoretical standpoint each runner is entitled to an even start with his fellow contestants, and a competent Starter will in every instance recall the field if one runner has obtained an unfair advantage over the others. A former rule, since eliminated, did not permit the recall shot, hence the uncertainty concerning this rule.

Question—If the Starter fires his pistol and then recalls the contestants, can he penalize for a false start?

Answer—If the Starter fires the pistol and then recalls the runners, no penalty shall be inflicted upon any competitor for making a false start.

RULE 21: Question—Does an illegal premature (or "jump") start call for a penalty in every instance?

Answer—Yes, under NCAA Rules there is no option, provided the Starter does not fire the pistol to start the race.

Question—What constitutes a "jump" start?

Answer—A runner may be able to get into action faster than his competitors because of faster mental reaction. This does not, however, entitle him to be rising from his mark when the gun is fired. When this happens the Starter should call the men up, or recall the field if the gun has been fired. A false start should be charged to the offender if the gun has not been fired. The starter has sole control over this part of the competition; his decisions may not be questioned.

Question—What is the correct crouch start position in so far as the hand position is concerned?

Answer—The rules state that no part of

*From—Official NCAA Track and Field Rules, published by A. S. Barnes and Company, New York, New York.

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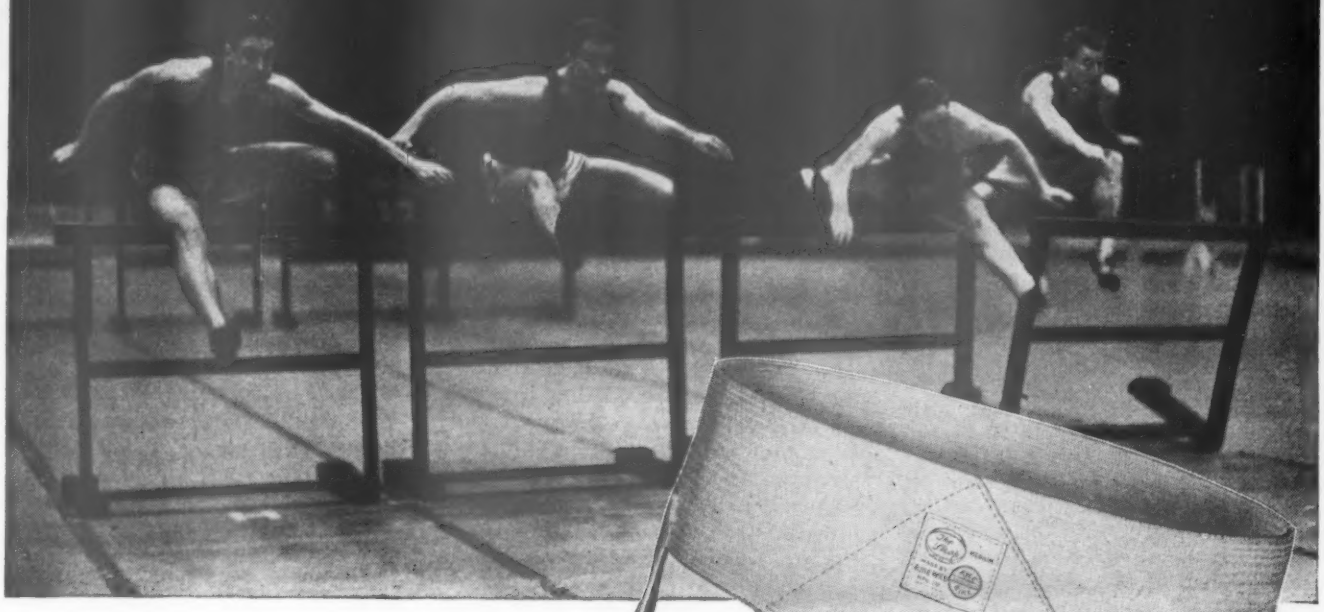

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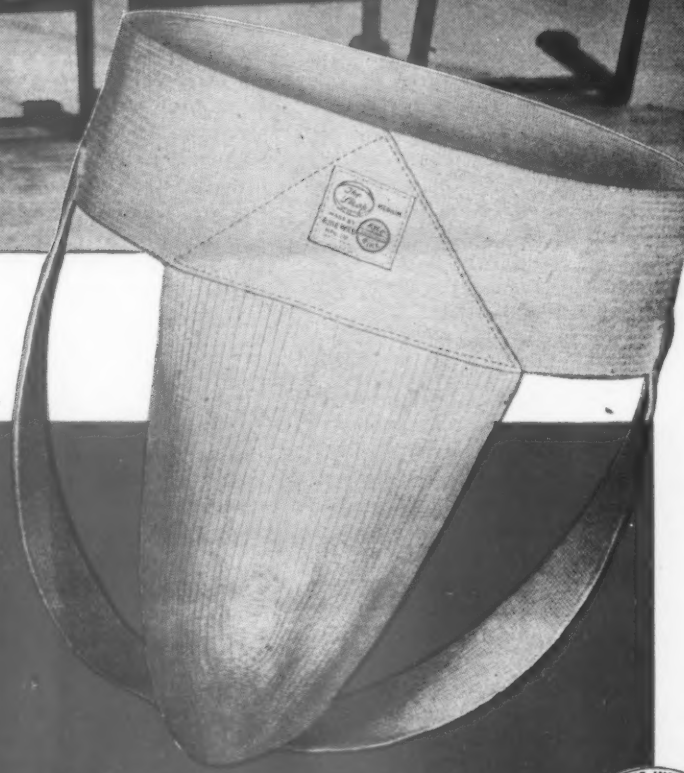

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the competitor's body shall touch the ground on or in front of the mark before the starting signal is given. Many track athletes do not understand this point and often violate the rules by placing the hand on or slightly ahead of the starting line. The front foot and hands may be placed up to the starting line but never on or beyond it. There is no rule that prohibits a lean-over; in fact, this is a recognized point in the standard start.

Question—Are starting blocks legal?

Answer—Yes, provided they are rigid foot blocks without spring which may be quickly placed. Hand blocks are not permissible.

Question—After the Starter has given the instruction to "Get set," how soon may he fire the gun?

Answer—After giving the instruction to "Get set" an interval of at least two seconds must elapse before the discharging of the pistol. It has been proven to be best interval of time for fair start.

Question—When shall a competitor be disqualified from the race for jumping the gun?

Answar—If a competitor touches the ground on or in front of his mark, or clearly starts to rise from his mark without the pistol having been fired, it shall be considered a false start. The Starter shall warn the offender and shall disqualify him at the second false start. If, however, the Starter fires the pistol and then recalls the runners, no penalty for false start shall be imposed.

Question—May the contestant be penalized in yardage for the first false start when the gun was not fired?

Answer—No, but the second false start disqualifies the contestant.

Question—In relay races will a whole team be disqualified if the first runner of the team makes two false starts?

Answer—Yes. Coaches should be careful to place a steady man in the lead-off position. While the starter usually shows more latitude in starting relay races in the strict application of the false start rule, nevertheless he has no alternative but to disqualify the team if the lead-off man makes two false starts.

The Starter will utilize the final minutes before he receives the signal that everything is in readiness from the head finish judge to advise the runners as to the starting rule. He will tell them how he will give the commands to come up, get steady, and wait for him to fire. Then he will do exactly as he has instructed them.

The Pistol Firer will state the starting rule and tell the boys he will hold them two full seconds, then he will unintentionally undo everything and double-cross them by firing a quick gun. Most Pistol Firers fire while crossing the "T" in "Set"; some of them do not wait to cross the "T" in "Get" before firing.

Quick firing of the pistol isn't the only difference between the Starter and the Pistol Firer. Probably no man can start every race without having some false starts. Sometimes a Starter will be forced to fire a recall shot because one man leaves just when he decides to press the trigger. If he fires frequent recall shots he is a Pistol Firer. A starter will seldom fire twice. He is an expert. He practices to keep his visual-muscular co-ordination. He instills confidence by his self-assurance and the sprinters know that every man will get an even start and that the fastest runner will win the race. Expertness, honesty, and firmness are attributes quickly recognized by hardened old "gun-beaters," nervous kids and champions.

Perhaps the Pistol Firer should have a chance to say a word. He might say, "If you track coaches taught your boys to hold we would not need to fire the gun so quickly to save them from breaking. It would appear that you not only want us to start the races but to coach the boys as well." No, we are not asking that, as a Starter will tell you, but even if we were it might not be asking too much. Most high school coaches do not get one extra dime for coaching track. They are teachers who are out on the track every afternoon in good and bad weather supervising your boy and mine in a fine athletic sport. They give up their spring week-ends to drive boys hither and yon so that they can test their abilities against the boys from other towns and cities in the county or state. If you are not willing to learn to be a Starter, then tell the coach and let him find some one who will do the job.

Starting requires knowledge of the rules and a bit of psychology; it requires poise, quick reaction, a good pair of eyes and much practice. As you practice you gain confidence in your ability which you impart to the boys on their marks. They must know that you will hold them until they are steady and that you will then wait longer to see that they stay steady. They must know that you recognize a false start and can save all but one man by a fast "Come up," pick out the false starter and warn him that another break will put him out of the race. They must be sure that you will enforce the rules whether the lad is the son of your next door neighbor or a member of the visiting team.

Experience in starting does not always assure expertness. Some men work in many meets because the coaches securing their services know that they are honestly trying to do a job. Sooner or later in each short race they will get the runners off together. This type of official either does not recognize a false start in the making or his reactions are too slow. He is the man who fires twice, time and again. He fires when the first runner starts, then recognizes his mistake and fires the recall shot so quickly that the two sounds almost blend. No one can be penalized. He lines them up again and tries his luck. Meanwhile the spectators are trying to figure out what this track stuff is all about.

Whether or not the coach is for his track coaching, he owes it to himself and to the boys to give them the best training he can. Otherwise he becomes the Pistol Firer of the coaching profession. He should spend 15 minutes for a few days each week during the early part of the season teaching his boys how to come up into the "Set" position comfortably and relaxed. Force them to "Get Set," have them count slowly 1,2,3,4,5, then rock back into their "On your Mark" position. Doing this repeatedly will give the boy confidence in his ability to hold. After he is able to move up and down without tension, give him six or eight starts. Make him hold the full two seconds on the first two or three and then give him a fast one-half second. Follow with another two-second interval, then a "Get Set-Bang." Teach him that if he is comfortable and relaxed in his "Set" position he need not care how fast or how slow the starting command is given, he will be ready to go with the gun. To be ready for a Pistol Firer, he should move quickly into the "Set" position when that command is given. This may necessitate holding a bit longer than usual if the Pistol Firer turns out to be a Starter, but if his position is comfortable and his attention is focused on the gun, he will move out with the others.

Some states now have certified track officials. Those men cannot become Starters by reading the rules. Practice makes perfect.

Decathlon Champions

(*continued from page* 6)

country's recent championships. There are two other decathlon men in South America with good records—Mario Recordion of Chili and Celso Dorio of Brazil; each has scored 6,886 points.

Across the Atlantic, Sweden appears to have the strongest group of competitors in this field with E. Anderson (7,039), G. Waxberg (6,819), Svenson (6,679) and B. Larson (6,620). Russia shows a very competitive group with Kusnetsow (6,930), Denisenko (6,660) and Lepp (6,623). Switzerland's bid for the laurels will be made by Scheurer who has scored 6,853 points. Holmvang (6,987) of Norway is improving very rapidly and may be the man to watch.

There is always that "dark horse" who gallops upon the scene when the competition gets tough. This Olympic year of 1948 will be no exception. Many would-be champions will be rudely pushed aside by the aspiring neophyte as he rushes headlong to the championship.

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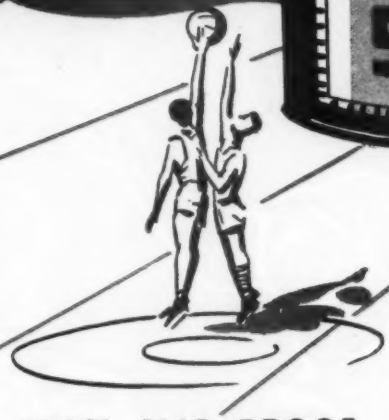

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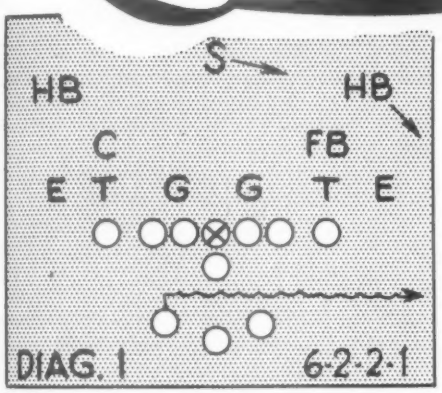
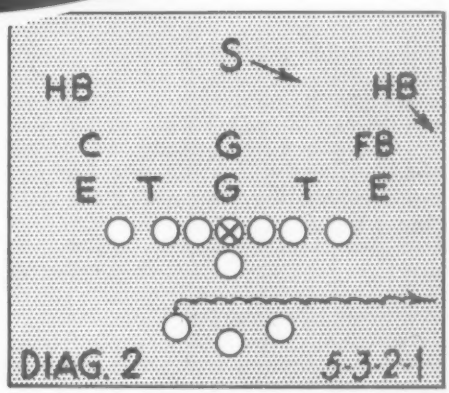
A New Technique for Teaching Downfield Blocking

By Sol Kampf

SOL KAMPF graduated from Davis and Elkins College. During the war he served overseas with the First Marine Division and following his return from service was appointed assistant football coach at Davis and Elkins. At present he is working on his master's degree at Indiana University.





WITH the coming of spring practice in football, many coaches will no doubt be out to improve certain phases of the system they taught last fall.

After attending high school, college and professional football games from coast to coast and studying motion pictures of them, the writer is of the belief that the art of downfield blocking is one of the most undeveloped phases in the game today.

Perhaps some readers will be quick to disagree with that statement, basing their claim on the fact that long runs were more numerous last fall than ever before. In reply we would like to point out that, in general, the tempo of play today is faster and the style of play more complicated than that of yesterday.

According to my own experience I would like to list the following as the main reasons for long runs in our present era:

1. *Quicker opening plays in the line, especially out of formations like the T.* These plays permit the ball-carrier to get up to, and past, the line of scrimmage faster than ever before and with less opposition.

2. *Better coaching and more information on ball-carrying available.* Runners have more opportunities than ever before to learn improved methods and to practice them. In addition the motion picture and radio, put great emphasis on spectacular long runs. Also, many backs in college today are more experienced as a result of playing on service teams.

3. *Poorer tackling.* So much time is now devoted to meeting complicated defensive patters that fundamentals are oftentimes neglected. In the days of the single- and double-wing back popularity, coaches prepared their teams to meet either over-shifted or under-shifted defenses while today they must prepare their units for play against five- six- seven-or eight-man lines, overshifted or undershifted one way or the other or both.

4. *Potent aerial attacks.* The threat of the now highly developed forward passing attack is so great that the defensive backfields must play rather loosely, thus weakening their ground defense.

5. *The man-in-motion.* At times he has played havoc with the defensive backfield or line, or even both, just by going in motion. Two outstanding examples of this fact are to be found in studying Buddy Young's performance against the Chicago Bears in the All-Star game last summer and "Bump" Elliott's exhibition against U.S.C. in the last Rose Bowl encounter.

Diagrams 1 and 2 show two rather widely used types of defenses against the T formation with a man-in-motion.

Many coaches prefer to feel that long runs are due to good downfield blocking. On the contrary, we feel that intelligent downfield blocking is an undeveloped art. Many coaches demonstrate the type of blocks they want their linemen to use on the line of scrimmage but few actually show a boy a method of applying downfield blocks other than to stress the point that a body block is most desirable. When a boy unsuccessfully attempts a body block downfield it is not enough to tell him that he missed his assignment. He is more aware of that than anyone else, but seldom does he realize *why* he has failed.

Defensive Man's Reaction Important

How then, should a downfield blocker proceed? That depends on what I would term the fundamental condition in downfield blocking: How does the defensive back react to the play? We all realize that there is no one set formula for dealing with all people in one given situation. This is simply because human beings, unlike machines, react differently to a situation.

Frequently one reads or hears of a salesman who met a problem customer and finally put the sale across when he altered his sales speech according to the reaction of that customer. The same holds true for a downfield blocker meeting a defensive back; he must be blocked according to his reaction to the play.

Because we are all consumers and many of us at one time or another have read something about salesmanship, we would like to draw an analogy between the salesman's approach and the downfield blockers' approach to their particular situations.

Primarily the salesman must expect three general types of reactions to his sales approach: (1) the customer wants to buy his product right off; (2) the customer is indifferent as to whether or not to buy it; and (3) the customer is set against buying it.

Actually the same holds true for downfield blocking. To begin with then we must ask ourselves: what are the possible reactions of a defensive back to a play? Fundamentally speaking there are only three: (1) he can rush forward to meet the play; (2) he can hold his ground and wait for the play to come to him, first protecting his territory; and (3) he can

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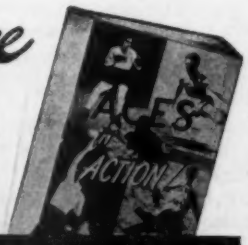

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slide according to the defensive pattern set up by his coach, or once the play has developed directly at him, he can float backwards to play both the blockers and the runner in an effort to hold them up so that other team mates may come to his aid in making the tackle or until he can stop the play alone.

You might have a defensive backfield reacting in any combination of the above, usually according to their position. Sometimes, oddly enough, you might even find one man reacting in two of the above ways on a single play.

As an illustration let us take one of the most common types of plays run from the T formation, the quick hand-off, and show how three defensive backs may react in three different ways listed above on the same play.

Diagram 3 shows the play as it is set down on paper before being tried on the field.

The play looks fine on paper if only those defensive men would stay put and not react.

Diagram 4 shows possible reactions to the play by three defensive backs (fullback, left halfback and safety man) if the runner breaks through the line.

Analyzing the situation we find: (1) the fullback comes in to meet the play as quickly as possible; (2) the left halfback holds his ground, keeping an eye on the man-in-motion or for further development of the play (for example: a pass from the T formation may start out first as a fake into the line, or vice versa); and (3) the safety man who has the longest time to react to the play will be observing the overall set-up. If the ball-carrier does break loose through the line and into the secondary with, let us say, the center leading him, the safety man will have to use some means to stall the runner. He might back-pedal or slide, playing both the blocker and the runner at the same time.

Handling Possible Reactions

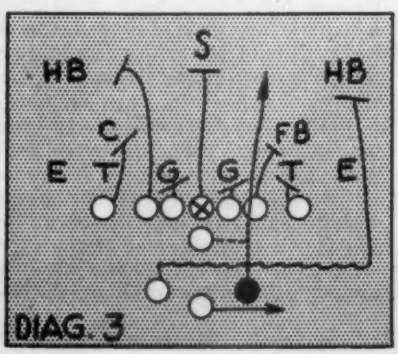
What can the downfield blocker do about these three reactions?

In general, when a defensive back rushes in to meet a play, the downfield blocker should use a long body block, preferably low, the exact height of it depending on the speed at which the back is traveling. Most of the time this will be about thigh high. Furthermore, the blocker should make a great effort to get to the defensive back's legs.

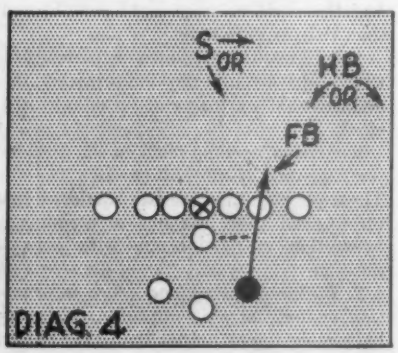
For the second type of reaction, where the defensive back holds his ground, the downfield blocker should approach the man exactly as if he were going to tackle him: legs wide, eyes on the man's hips, body completely under control. Occasionally he should study the expression on the back's face as he moves out to block his man. A good downfield blocker does not have to look back to see how the ball-carrier is progressing. That answer is usually found in the expression on the defensive back's face. The more excited he is, the more set he is to make the tackle and the nearer the ball-carrier is to breaking loose. The defensive back will try to rid himself first of the blocker or possibly even avoid him completely in trying to stop the runner. Here the downfield blocker must rely on his sense of timing to execute his block. He should actually strive to block the defensive back while he is dividing his attention between him and the ball-carrier. This handicaps the defensive back since it practically forces him to do two things at once.

Thus if the defensive back steps in to tackle the runner, a long body block should take care of him. If, on the other hand, he stands still and "freezes" in his position, a shoulder block or a body block should eliminate him from the play. However, should the third type of reaction prevail where the defensive back slides or back-pedals, we have another situation.

The downfield blocker must be careful he does not become too anxious to apply his block. If he does, the back will probably slide out of it, like a boxer rolling with the blow as he is hit. The downfield blocker must pursue this type of man no matter how far he backs up (within reason, of course) and then, when he is sliding or back-pedalling, the blocker might be wise to feint blocks at him concentrating on applying a shoulder block to ride him the way he is sliding. Sometimes the downfield blocker may make effective use of a high, well-controlled body block, pro-



DIAG. 3



DIAG. 4

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***Kinesiology Laboratory Manual** by Leon G. Kranz, M.S., published by the C. V. Mosby Company, St. Louis, Missouri. One hundred seventy-seven pages, price $2.75.*

Leon Kranz is professor of physical education and chairman of the department at Northwestern University. His book is an extensive analysis of body movement with exercises prescribed for all muscles. There are fine drawings of all the skeletal and muscular areas and explanations of the movement of each. Mr. Kranz states that the muscles that man uses he maintains but loses those he fails to use.

Mr. Kranz makes an interesting observation when he reports that golf, table tennis and bowling require muscular development for ease in playing the game, but do not in themselves develop the muscles. Even such sports as boxing, football and basketball do not develop muscles but like the former sports require muscular development. That is the reason coaches devote a certain proportion of their practice session to calisthenics and drills. Mr. Kranz sums up his thinking when he suggests that individuals should train to participate in sports and not participate in sports to get fit. Developing exercises for the various muscles are included in each chapter.

***Exercise During Convalescence** by George T. Stafford, published by A. S. Barnes and Company, 67 West 44th St., New York 18, N. Y. Two hundred eighty-one pages. Price $4.00.*

George Stafford is professor of physical education at the University of Illinois. His book supplies information on a subject heretofore but lightly covered. The role of the physical educator in a program of rehabilitation is an important one. In recent years the value of exercise following operations and sickness has been more clearly realized but little specific information was available as to co-ordinated convalescent exercise.

The author pioneered the use of corrective exercise and recently supplemented his experience by his work in the Army and Navy rehabilitation programs. Mr. Stafford answers such questions as, "Why are prescribed exercises beneficial to convalescents? What therapeutic exercises should be used for specific defects, or for treatment of individuals convalescing from illnesses or injuries? How much exercise can the convalescent individual safely tolerate?"

***Basketball Illustrated** by Howard A. Hobson, published by A. S. Barnes and Company, 67 West 44th Street, New York 18, N. Y. Eighty-six pages, price $1.50.*

Howard Hobson, formerly head basketball coach at the University of Oregon, is head basketball coach at Yale University. His excellent book stresses the fundamentals of individual and group play and contains fourteen diagrams and over one hundred illustrations. The various styles of defense and offense are discussed, and there are chapters on training and conditioning and self-testing suggestions for the basketball player.

The excellent photographs and accompanying text make all phases of the game clear. This is a must for anyone connected with basketball.

A Test of National Cultures

(*continued from page* 36)

we have been unable to stop our wars for this religious and athletic celebration and were unable to conduct the games in 1916, 1940 and 1944.

The modern games consist of competition in hundreds of contests—track and field athletics, swimming, wrestling, boxing, equestrian events, yachting, winter sports and many others. It is foolish for any country to claim that they have won the Olympic Games, first, because no official score is kept and, second, because the home team usually places the largest number of contestants in all events.

Let us take a close look at only one of these sets of events in the modern Olympic picture, Men's Track and Field. Our Olympic coaches will be faced with the task of selecting and training an American team for twenty-three events. Olympic excellence in many of these events present problems that are beyond the control of our own coaches. We as a nation need not look for any victories where endurance and stamina are the important factors. As a nation we are geared for speed and co-ordination but our way of life vitiates our having good distance runners. Walking is a lost art with us. We are also weak in the steeple chase and javelin

We are the only country with a teacher-coaching system extending from our grade schools up through our high schools, colleges, universities and athletic clubs, but nowhere in the world does the youth receive coaching and encouragement in the practice of most of the events on the Olympic program.

Without a doubt we will find it impossible to produce winners in the 5000-meter run, 10,000-meter run, 3000-meter steeple chase, 50,000-meter walk and the javelin throw. We have never won any of these events in the history of the Olympic games. Little Finland has won first place in these events seventeen times with the rest of the world scoring a combined total of ten victories. We do not place special emphasis on distance running in the United States. Walking long distances is not common among Americans and our potential javelin throwers are baseball players. Perhaps the reason for this is our "rush" type of culture; too

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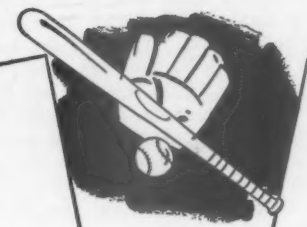

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- ★ GUS MAUCH — New York Yankees
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- ★ GEORGE LENTZ — Washington Senators
- ★ JAMES TADLEY — Philadelphia Athletics
- ★ BOB BAUMAN — St. Louis Browns
- ★ ED "PACKEY" SCHWARTZ — Chicago White Sox

NATIONAL

- ★ HAROLD WENDLER — Brooklyn Dodgers
- ★ "DOC" WEAVER — St. Louis Cardinals
- ★ CHARLES LACKS — Boston Braves
- ★ ANDY LOTSHAW — Chicago Cubs
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many automobiles; too many effortless methods of transportation; too much heavy food eaten at all hours; a lack of regular sleep; or too great a per capita consumption of alcohol and tobacco. Whatever the reason, we can say that our American scene does not produce Olympic champions in these events. It is safe to say that the North European countries will produce these Olympic winners. It might be well to consider the rugged but little known Russians in these events of stamina, but so far they have never been taken into the Olympic family of nations. However, they may accept an international invitation to join before the 1948 games and add some interest in the weak events.

There are three other events of the remaining eighteen where we have been traditionally weak. We have not been able to win the 1500-meter run since 1908 in spite of considerable interest and emphasis on its American counterpart, the mile run. My guess would be that some Scandinavian country or Great Britain will win this event.

The United States has not produced a marathon champion since the victory of Johnny Hayes in 1908. Finland or Japan has the best chance of winning this event. Strangely enough the marathon was never held as an event in the Olympics of ancient times but it is now the most popular event on any Olympic program. It was run in Athens in 1896 to commemorate the famous feat of Pheidippides, who, in 490 B.C., carried the news of the remarkable Athenian victory over the Persians from the Plains of Marathon to Athens. When arriving at the market place in Athens he gasped, "Rejoice, we conquer." He then showed a lack of training by expiring on the spot. Historians tell us, however, that this message was carried by a man who had spent many hours preceding the race in vigorous fighting!

Very few of our American youth are willing to pay the price of arduous work to prepare themselves for a race of over twenty-six miles; it is too far and too tough for us.

Japan has placed special emphasis on the running hop, step and jump as well as on the running broad jump and marathon. They will probably produce the new champion in the hop, step and jump but they will receive their main competition from several North European countries. This event is seldom held in American track meets and we have not produced an Olympic champion for forty-four years. It is an excellent example of national concentration of effort on a single event or set of events. Greece and many other countries emphasize the marathon. Norway, Finland and Sweden place special emphasis on the distance events and javelin. Great Britain has always been strong in the middle distances and the 1600-meter relay. Germany has shown special training and emphasis on the shot put, hammer throw and javelin throw and won these three events in the last Olympic games. Ireland always has been a strong contender in the hammer throw. The Irish would rather win this event than any other and they spend considerable time practicing weight throwing. It might be well to consider, however, that the war torn countries of Europe will undoubtedly be weaker in the 1948 Olympic games.

Great Britain is traditionally strong at 800 meters and they have outscored the rest of the world in this event 6 to 5, with the United States winning the other five times. This race looks like a British victory to me. We have won only once since 1912. Here we may score an upset. In the 400 meters we have not lost a race since 1924 but Herbert McKenley of Jamaica seems headed for this Olympic title. Great Britain will be defending champions in the 1600-meter relay but we should have an even chance of beating them.

There are twelve events remaining in track and field competition where we are traditionally strong. We should win at least ten of the following twelve: pole vault, running broad jump, high jump, shot put, 200 meters, 100 meters, 110-meter hurdles, 400-meter hurdles, discus throw, hammer throw, 400-meter relay and the decathlon.

A quick look at these events shows that they represent speed, agility, and strength, but that they are not events calling for endurance and stamina. These observations seem to be in keeping with American culture and taste, or, perhaps it is better to say, with our way of life.

In any case the United States will undoubtedly win a slight majority of these track and field events from the rest of the world at the 1948 games. In track and field we have always had the most powerful Olympic team and we also have scored more first places in every Olympic meet than any other country. In spite of our weakness in events calling for stamina and endurance, the United States has scored a total of 116 Olympic victories with the rest of the world combined scoring 88.

It might be well to add here that this short but optimistic report on the 1948 games is based partly on the fact that most of our strong competition usually comes from countries now torn apart by political strife and/or economic need.

Personally I believe that if Baron de Coubertin were here with us today he would agree that these Olympic games have fostered international good will and an understanding between nations. It is unfortunate that we have had so many technical squabbles in the past, but all of us can help by showing true sportsmanship and a spirit of co-operation with people unlike ourselves in race, creed or color.

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1. Arch. Dermat. & Syph. 56:601, 1947.

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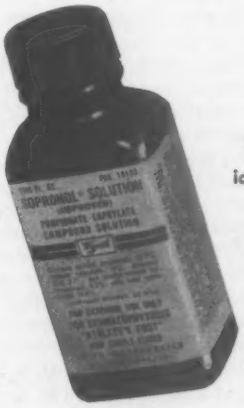

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Why We Fly the Breast Stroke

By Richard O. Papenguth
Purdue University
Swimming Coach,

The first picture shows beginning of breast stroke kick; legs straight, not quite together. Second; the recovery of the leg kick, knees bent, slightly together, feet out. Third; position of legs ready to drive together.

THE flying or butterfly breast stroke was first accepted as a legal stroke for competition in about 1936. At this time, by means of cablegrams, the International Amateur Swimming Federation was given a description of the stroke, and it met with their approval. We later found out that it was through misinterpretation that the stroke was legalized. If the International Committee had seen the stroke demonstrated, they would probably not have consented to its use. However, this "flying breast stroke" complied with all the rules of the breast stroke, and since it was legalized, its development in the United States has done a great deal to advance the breast stroke possibilities of this country in the Olympic games.

All the records for breast stroke swimming, for both men and women in the United States, have improved a great deal since the advent of this style of swimming. In fact, the American men swimmers now hold several of the worlds records in breast stroke. Before the flying stroke was introduced into competition the world mark for 100-yard breast stroke was 1:06.4. Since that time it has been lowered considerably, and just recently Keith Carter of Purdue, brought it under the minute by swimming the 100 yards in in :59.4. The 200-yard mark was 2:25.4 in 1934, and this has been brought down to 2:16.4 by Joseph Verdeur of Philadelphia. Both of these records show a drastic drop in time due to the perfecting of the flying type of stroke.

The American record for women swimmers in 1938 was 1:18.5 for the 100 yards. This time is now 1:13.8, held by Clare Lamore, of Providence, R. I., and is close to world record time. The 220-yard time was dropped from 3:15.4 to 3:12.4 by twelve year old Patty Aspinall of Indianapolis, the first time she attempted distance flying; later at fourteen, she lowered it to 3:07.7. The American mark is now 3:07.2, held by Pat Sinclair of New York. The women's times are still considerably slower than those made by foreign women, but they are now getting within striking distance of the foreign marks.

The only showing made by United States swimmers in Olympic breast stroke races has been by Robert Skeleton, of Chicago, who won the event in 1928. Most of the foreign swimmers still use the orthodox style as Skeleton did then. Many of them, however, are changing over to the fly, notably the Russians who are swimming times comparable to those of U.S. swimmers.

Maria Lenk, of Brazil, held the 200-meter world record for women at 2:55, using the flying stroke, and she set records up to 500 meters. These have since been broken by Nel Van Vliet of Holland, who swims orthodox and who has applied for new world marks for the 100 meters and 200 meters.

Miss Van Vliet is a very powerful swimmer, having unusually muscular shoulders and legs. She won both the 100- and 200-meter events at the U. S. National Championships this past summer, setting new records for the events. When questioned about the flying breast stroke, Miss Van Vliet admitted that it was much faster for short distances than the orthodox stroke, but she still believed it could not be used to swim the longer races. On short sprints the American girls could beat Miss Van Vliet and it is my contention that, if this is true, she can be beaten over longer distances with the flying stroke.

Many swimmers, both young and old, do swim the flying stroke for miles and it is only a matter of time before some of these swimmers will show the world that it can be used to race the longer events. All the breast stroke swimmers at Purdue have been timed over distances up to one mile doing the flying breast stroke. The best time turned in was by Robert Dunlop of Chicago, who flew the half-mile in 13:13.2, and the 1500 meters in 25:55.1,

very good time for the breast stroke.

The main reason why the foreign swimmers have been superior to those of the United States in the breast stroke event is because they are taught this as the *fundamental* stroke and a great deal of stress is put on it. The teachers in the United States, on the contrary, put practically all their emphasis upon the crawl as the main stroke. It is our belief that more classwork should be given in all strokes, and that we should put more emphasis on the flying breast stroke if we expect to further our interests in that style of swimming.

Also, foreign countries have many more races in the breast stroke and they compete over much longer distances. In the United States we swim only the 100- and 200-meter events. I believe that more and longer races should be instituted for breast strokers in order to create more interest in this style of swimming. European swimmers are adopting the flying breast stroke as is evidenced by the fact that no orthodox breast stroke swimmer reached the finals of the recent European Championships. Unless the two styles are separately classified the old style may become obsolete in the international racing sphere.

We have been doing the flying breast stroke competitively for only ten years and have made a great deal of improvement in this method of swimming. It took the swimmers in the United States from 1903 until 1926 to realize that the crawl stroke could be used over all distances. This was proved by Gertrude Ederle when she swam the English Channel, using the crawl all the way, and broke all existing records for that feat at the time. I believe that we are going through this same period with the flying breast stroke, but that more has been accomplished in a shorter space of time, especially by our men swimmers. The women swimmers will improve in the flying stroke when they have mastered the proper technique and timing and realize that correct form is more necessary than brute force in this style of swimming.

RICHARD (DICK) PAPENGUTH, the highly successful swimming coach at Purdue University, is a strong advocate of the flying breast stroke. One of his squad, Keith Carter, is a record holder in the breast stroke. Accompanying the article Dick enclosed the following comment from a European publication. "No orthodox breast stroke swimmer reached the finals (of the European Championships) and it is obvious that unless the two strokes (flying and orthodox breast stroke) are separately classified, as many nations are advocating, the old stroke (orthodox) will become obsolete in the international racing sphere."

Since Nel Van Vliet visited this country, many of the women swimmers here are returning to the orthodox manner of swimming the breast stroke. We feel, however, that this is a step in the wrong direction because the flying stroke will certainly improve as did the crawl stroke during its early stages of trial.

The above conclusions have been reached by the writer after many years of observing and putting into practice all the new ideas developed by various swimmers and coaches. The result of using these ideas in classwork, and the training to develop flying breast stroke swimmers, can be seen in the fact that many of the individuals so taught have become national champions and record holders. Among these are Patty Aspinall, June Fogle, Jeanne Wilson, Roy Heidke, and Keith Carter.

Keith Carter is the latest example of what hard work and confidence in this type of swimming may produce. This young man has been swimming competitively for only two years, that is, since he entered college. Already he holds several world and American records in breast stroke, and has several American records in free style to his credit. It was just recently that Carter broke two world records and one American record in the breast stroke and two American records

(*continued on page* 58)

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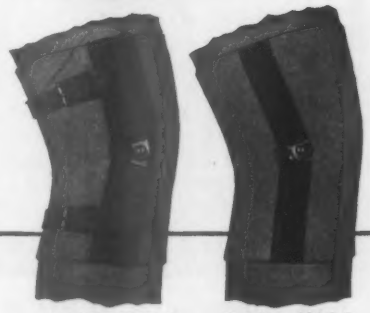

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Shot Put

(*continued from page* 16)

Abdominal and trunk exercises are valuable: 1. Lying on the table or floor and raising the legs or raising to a sitting position, 2. Side-to-side bending, chest weight machine exercises, and 3. Handling of the heavy bar bell or medicine ball for a few minutes.

The wrist and hand can be developed by use of the gripping machine and mariners wheel and flipping the shot from one hand to another above the head is one of the best.

In training, the practice puts should always be made in the circle and should be done from the "putting stance," which is the final position of the feet in the landing after the glide across the circle in the complete form.

A beginner, when learning form, should practice with a twelve-pound shot. After form is perfected it is best to work with the one which will be used in competition, occasionally using a heavier one. During the preliminary season four times a week is sufficient practice. This should be reduced to three times a week when the competitive season starts.

The amount of daily work varies with the individual; usually ten to twelve all-out puts with complete form is enough. A suggested plan for a typical day's *practice* would consist of the following: to warm up, jog an easy quarter to tone up the legs, loosen up the torso with stretching exercises, the arms and shoulders by pushing, and the wrists and fingers by handling the shot. The day's *workout*: 1. Start by taking five to ten easy puts with a forward step to putting stance at the toe board without reversing the feet; 2. Ten to twenty puts employing the shift or completed form; increase the effort with each put, the first five or ten without reversing the feet; 3. Finish the day's practice by putting ten or fifteen from a stand, "your putting stand," in which the weight is placed on the right leg, left knee raised, rock forward, and follow through with a good body reverse six or eight times without reversing the feet; then six or eight with foot reversed, if the foot reverse is habitually used.

Suggested Schedule of Week's Training During the Competitive Season

If competition is held on Saturdays, plan your hard work on Monday, Tuesday and Wednesday; then taper off on Thursday and rest Friday.

Monday: Begin workout by jogging, walking, then do two or three short sprints. Take about ten minutes calisthenics, general body-stretching exercises, stressing the warm-up with the torso and the arm. Do form putting, analyzing and correcting the errors of last Saturday. No

(*continued on page* 57)

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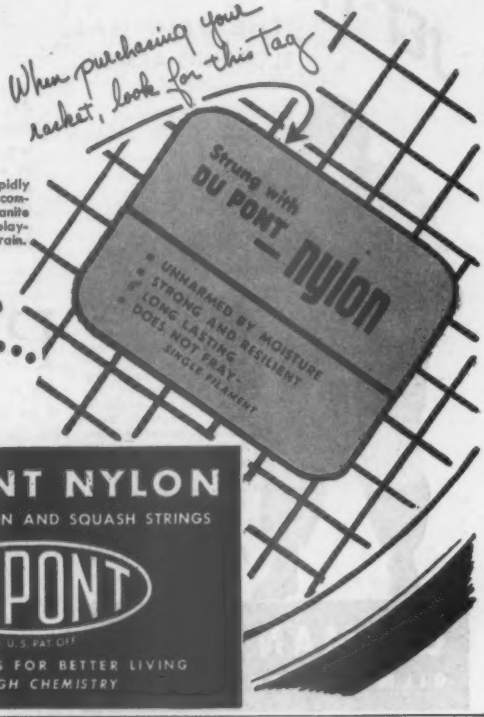

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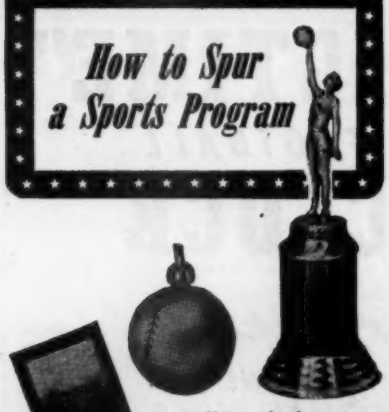

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New Ideas in Taping

by Roland Logan

ROLAND LOGAN, former trainer for West Point and the Boston Red Sox, is now running his own trainers supply organization. During the course of a year, Roland conducts several hundred clinics. At these clinics many new methods of taping are uncovered. Here are two new methods of taping hip pointers and shin splints.

PERHAPS the two most improved methods of taping the hip pointer (contused tissue on anterior-superior crest of the ilium) and the shin splint is as shown in diagrams 1 and 2 and will be discussed below.

Credit for this new method of taping the hip pointer goes to Mr. Art Badanok, coach of Inglewood High School Football Teams at Inglewood, California. Mr. Badanok is one of the oldest and most successful coaches in the State of California.

The secret of the success of this method is the application of two strips of two-inch tape from the patch of tape on the hip, pulled up at a forty-five degree angle, across the torso and under the opposite arm pit.

First, apply Skin Tuffner on the hip about one foot square and allow it to dry. Use two-inch strips of tape and make a patch of tape directly over the injured area. Use strips at least twelve inches long and overlap the strips one-half inch. Bind the ends to eliminate rolling or peeling. The total patch should be about the size of a small handkerchief, or approximate one foot square.

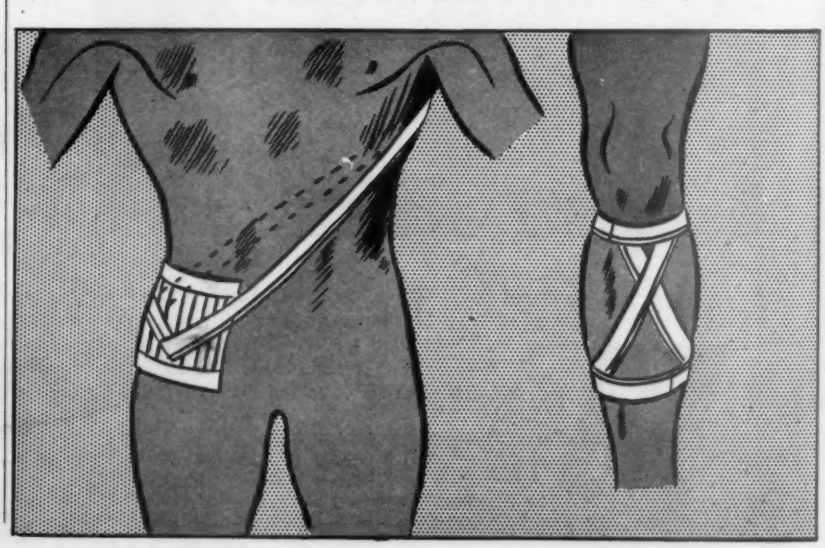
One must bear in mind that in such injuries there is bruised superficial tissue directly over the hip point. This is due to terrific contact, such as is made in open field, side-body blocking. Continued blows to this area are severe and often render the athlete incapable of playing. The use of long two-inch strips of adhesive tape as a pull-up or "lift" is now advisable. These strips of tape should be at least three feet long and should be secured at the lower side of the patch. Pull the long strips across and up at forty-five degrees on the chest. The pull should lift the patch up at least ¾ of an inch. By pulling up the patch the bruised superficial tissue is also pulled up into the soft area at the side of the body between the ribs and the crest of the hip. Non-bruised tissue is thus pulled onto the point of the hip where there was bruised tissue. Secure the top ends under the arm pit by crossing one over the other. It is advisable to use another set of these long strips as the single strands may tear apart.

One of the popular and newer All-Purpose Injury Pads made of sponge rubber can be taped on over the patch to cut down the blows of continuous pounding and irritation to this area.

Taping of Shin Splints

Dr. D. J. Archer, trainer for Los Angeles City College, has designed a new taping for shin splints which can be used as a preventative measure as well as a relief aid.

His theory is that constant tension should be put on the achilles tendon, and this can be done only by pulling up on this tendon, by taping above, below, and around the belly of the lower leg muscles (gastrocnemius and soleus).



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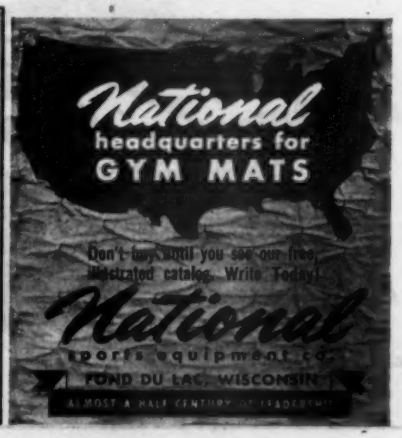

He supports his theory by stating that in running, when the foot is not in contact with the ground, it is held in a hanging position and is in a limpid state. That is, the tendons and ligaments are not pulling up on the foot to the ankle. He states that as the foot strikes the ground in hard, fast running, there is a terrific force thrown into the saddle or socket of the ankle. This shocking motion causes the entire lower leg to vibrate and often sets up an irritation along the internal and external areas of the two lower leg bones known as "shin splints."

To combat this condition he applies Skin Tuffner to the area to be taped and uses one-inch strands of tape applied lightly above and below the belly of the lower leg muscles.

He then takes a strip of tape 1½ inches wide and approximately 18 inches long and applies the middle section of this strand of tape on the lower piece of tape that is belted around the leg. He brings the two ends around toward the front of the leg and pulls up the muscles of the leg as he pulls the tape up and together at the center of the upper piece of tape. He secures it tightly. The "pull" on the tape is firm and with some force. He does not cut off the normal superficial circulation.

He doubles this taping above to give greater effect as well as to re-enforce the entire application of the tape.

This application is worn only during the time of physical activity.

Running The Ends

(Continued from page 32)

I feel that a T team needs a wide variety of maneuvers to get outside of smart ends. The complicated changing defenses facing us today do not make the job easier. Sometime or other during the past season we made use of everyone of these maneuvers diagrammed in this article. They are not plays, but merely a little different maneuver by the backs. In most instances the line blocking remains the same.

One feature of our wide attack that I like to use as much as possible is—keep our strong-side end down blocking the strong-side defensive halfback. This has a tremendous amount of deception. The defensive halfback never knows until the last second whether or not a pass or a run is on. Many times I have seen defensive halves backing up when the offensive end is approaching, figuring that our running pass is on. In reality he should have been coming up to tackle the wide ball-carrier, or should he? When the offense can use that running pass, what do you tell your defensive half when the strong-side end is coming at him on both running and passing plays? That is why I use it in most of our end runs.

Shot Put

(*continued from page* 52)

puts for distance. Start easy with the step, then the complete form. Finish with three or four 40-yard sprints.

Tuesday: Warm up with the same exercises as for Monday. Experiment to see how much warm up you need to be at your best immediately. Do routine daily practice on form with and without reversing the feet. Take ten or twelve puts for distance. Go to the discus or some other events. Finish up with short sprints.

Wednesday: This should be the hardest day's workout. Take usual warm-up exercises. Start by practicing form, giving careful attention to the feet, the rock and the follow-through. Start easy, increasing the effort. Put for distance ten or fifteen times. Measure and check faults while making your best effort. Take ten or fifteen standing puts and finish up with short sprints.

Thursday: Start tapering off. Warm up with easy work. Routine work on form, stressing the follow-through.

Friday: Rest with easy work.

Tennis Fundamentals

(*continued from page* 34)

gressive attack furnishing more speed with less energy. The Eastern style as used by myself, employs only two grips; one for the service and all forearm strokes; one for all backhand strokes.

Grip for Forearm Strokes—Hold the racket at the throat with the left hand. Extend it comfortably in front of you. The face of the racket at right angles to the ground. Grasp the racket with the right hand so that the back knuckle of the thumb is directly on top of the racket, about an eighth of an inch to the left of center. The butt of the racket should rest easily on the heel of the hand. The thumb is wrapped around the racket and the fingers extended comforatbly along the handle. This grip is often described as "shaking hands with the racket."

Grip for Backhand Strokes—From the forearm grip described above turn the racket to the right until the thumb extends diagonally across the back. This should bring the back knuckle of the first finger directly on top of the racket. The fingers again are spread comfortably along the grip but in this case the thumb may be either wrapped around the handle or extended up the back.

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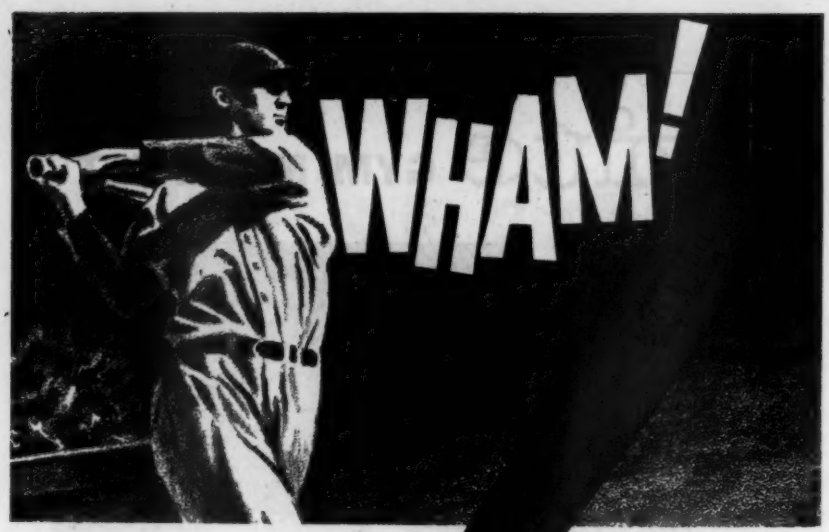

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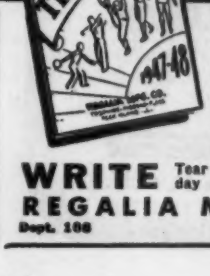

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Why We Fly The Breast Stroke

(*continued from page* 51)

in the crawl, all in a space of four days. This is an outstanding feat for any swimmer.

Joseph Verdeur, of Philadelphia, the national champion and world record holder for the 200-yard breast stroke, also swims very fine free style times for the 100, 200, and 440 free. The excellent showing made in free style by these two breast stroke swimmers leads us to believe that the flying breast stroke is good exercise for free style for it loosens up the shoulders and teaches the proper pull and press of the hands.

Having presented several facts which support my belief that the flying breast stroke is here to stay, I will give some information which I hope will help to encourage prospective breast stroke swimmers, and make this style of swimming easier for them.

Body Position and Arm Pull

Body position plays a very important part in the flying breast stroke and we endeavor to keep the entire body on a horizontal plane at all times. Most swimmers, in using the arm pull for the flying breast stroke, begin to press too soon. The result is that the body is lifted too high out of the water; this also makes the legs sink. The body then assumes a bad angle in the water and a retarding action is the result. We overcome this by letting the arms drift downward about a foot under the water before starting the catch with the finger tips. As the hands take hold of the water and start their backward press, the head is lifted slightly. When the power thrust, or push, of the hands takes place, the head position is such that the swimmer can catch a quick breath without lifting the chin higher than the water level. The push part of the arm stroke is very important in that it gives most of the forward momentum and provides the impetus to throw the arms forward over the surface of the water. The head remains up as the arms are brought forward. The common fault of many swimmers lies in trying to *lift* the arms over the water and in ducking the head too soon in an effort to get a horizontal body position. The arms must be fully relaxed as they are brought forward because if they strike the water relaxed no harm is done. However, if the arms are not loose as they strike the water, a definite retarding action is noticed.

There are several ways of bringing the arms down through the water in the arm pull. Some swimmers pull wide, some bring the arms down under the body to-

gether. We believe in sliding them wide to shoulder width, then pulling diagonally toward the crotch until the hands are a foot apart, and then giving the final push-through toward the legs. I should like to emphasize the push-through for I feel that many swimmers sacrifice this important feature and cut their stroke short in order to get the arms forward over the water.

Leg Kick

The leg kick is a very important factor in the flying breast stroke. Many swimmers have cut the leg motion down to a very narrow kick. I believe that a wider leg kick is quite necessary in longer races with the flying breast stroke. The narrow leg kick may be all right for sprinting, but I still feel that there is a definite need for powerful leg drive in sprints because the leg kick is a major source of power in the breast stroke.

There are many types of kicks used by various swimmers and any one of these, if properly timed, is adaptable to the flying stroke, with slight changes. After viewing underwater movies of the Japanese breast strokers taken at every conceivable angle, I believe Keith Carter comes as close to using their type of kick as any swimmer I have watched. I work principally on the idea of cutting down leg resistance; this is done by keeping the knees as close together as possible as they are drawn up for the leg recovery. The instant the feet start up for recovery we try to snap them back with a whip-like motion below the knee. The knees are pulled up into only a one-third kneebend. The Japanese swimmers are able to bring the soles of their feet together but they have more flexibility in the hip joint than we have. However, it was noticeable in the films that there was a definite backwash from the feet which caused a slight retarding action and kept the legs from rising to the surface for good body position. I believe as much power can be obtained in the squeeze by stopping the legs about three inches apart as can be had by bringing them tight together. This also permits the legs to relax sooner and drift to the surface for better *body position*.

Many swimmers find it difficult to lift the legs or to relax them so that their feet will float to the surface after the leg kick has been completed. This can be accomplished by doing a lot of practice kicking with tennis shoes on. Relax the legs after each kick and let them float to the surface. It takes considerable patience to learn to do this, but it can be done. Our swimmers practice wearing shoes for miles at a time, and it pays dividends. We tried to have some of them demonstrate how their legs used to sink before they learned this relaxation—and they could not *make* them sink. Kicking with shoes on not only teaches leg lift for correct body position but also strengthens the leg kick to

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give more power to the stroke.

Much of our arm pulling, which is done to develop strength in the arms and to teach the correct press-push, is also done with the shoes on. Again the swimmer finds it very difficult to pull because the feet want to sink. The swimer must *relax* properly and get the proper *push* in the arm stroke in order to keep the feet up.

In a previous article* I mentioned the two different types of timing used in the flying breast stroke. For distance swimming, the glide stroke is used, which is "pull, kick, and glide." The sprint stroke timing is somewhat different in that there is no glide; its timing is "pull, kick, pull, kick." More recently, the men swimmers who have been making fast times for the longer distances are using a timing which is in-between the spring and distance timing. Some coaches call it the "jump stroke." It is difficult to describe and a swimer must be able to feel it for it is not a glide and does not have the fast timing of the spring. It resembles the sprint stroke timing but is done in a manner as relaxed as possible in order to keep going over a greater distance than would be possible for a sprinter.

One more point we might add is that the underwater type of stroke is being used less and less. Most of the swimmers come to the surface on the first pull on both the starting dive and on the push-off in the turn. We find this much faster and less tiring. The big factors in the flying breast stroke are relaxation, timing and condition.

Many things about the flying breast stroke depend upon the physique of the swimmer. A stroke must fit each individual and it is best to bring out and stress in each individual that part of his stroke in which he is getting the most efficiency. We have disproved the theory that only certain types of builds are capable of doing the flying breast stroke. We have had individuals of all sorts of builds and sizes who have been successfully developed into good flying breast stroke swimmers.

Our swimmers kick, pull, and swim miles of this flying breast stroke. We know it can be done faster and better than the orthodox stroke. The men swimmers are proving this fact, because even the high school boys are getting faster all the time. The women swimmers have also improved a great deal and I am sure there will soon be a big improvement for longer distances by using the flying stroke. We shall continue to fly the breast stroke.

* ATHLETIC JOURNAL, February, 1946.

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A New Technique for Teaching Downfield Blocking

(*continued from page 44*)

viding he is close enough to attempt it. How close is close enough? Let us use a vivid term here and say: "close enough to bite him."

In this kind of a situation the ball-carrier must alter his path to the goal line and this takes plenty of practice on the part of the runners. Naturally the runner can do a great deal towards setting up the block for his team mate leading him.

According to our analysis then, we feel that the cardinal principle for downfield blockers to keep in mind is: *Approach the defensive back exactly as if you are going to tackle him, legs wide, eyes on target, body completely under control, then set up your block according to the defensive back's reaction to the play.*

It should be pointed out at this time that, whenever feasible (and most likely in the last two reactions discussed), the downfield blocker should try to use a high shoulder block so that he will stay on his feet and be in a position to assist the ball-carrier in his dash towards the goal line.

Common Faults

What are some of the most common faults in downfield blocking? Basically I think these are the most common:

1. *Approaching the defensive back with legs too close together.* This usually results in over-running the man.

2. *Over anxiety to use a cross-body block.* Many times, as explained previously, a shoulder block or a feint should be attempted first.

3. *Looking back to see where the runner is.* Very often this results in losing sight of the defensive man.

4. *Attempting very low body blocks at men who are stationary or are moving very slowly.* It should be remembered that the more slowly a man moves the more quickly he can change his direction.

5. *Improper timing while approaching a defensive back.* The defensive back likes to do one thing at a time if possible. Thus, to cite one example, in a quick-opening play the timing of a block on a halfback must be faster than on an end run. The timing of downfield blocks varies, of course, with the type of play attempted.

6. *Loafing while going downfield to block.* Some downfield blockers guilty of this seem to wait for the ball-carrier to get through the line before they decide it is time to block.

Method of Incorporating Skills

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1. Explain on a blackboard, then demonstrate on the field the three different types of reactions that defensive backs will most likely display.
2. Show the players how to handle each type of reaction.
3. Let the boys go through the methods by which they will handle each type of defensive back's reaction. Put a runner behind a blocker and a defensive back in front of him and give the defensive back instructions to react in either of the three ways described. First attempt this in slow motion then speed it up to suit the individual blocking. After this is accomplished, put two defensive backs in the secondary and have two blockers lead the runner, each assigned to a specific back.
4. Let the boys try these methods out in a game of touch football. For example, instruct the boys to play a five-minute game (about six or seven on a side) permitting only one pass to be thrown in any series of downs. This will put emphasis on running plays. In addition, restrict the number of boys in the defensive line of scrimmage so that downfield blocking will be stressed.
5. Integrate the skills learned into regular scrimmages and dummy scrimmages.
6. Show the boys moving pictures of their games of last season, if available, or films of college games and let them pick out and discuss flaws in downfield blocking.

The Coach's Role

Many coaches probably wonder why the fastest backs on their squad did not break away for more long runs last season. This is understandable when one realizes that many coaches try to develop one or two very fast boys to run in the open field, when the chances are that average backs would shine if the paths before them were clear. There are some features a coach must continually keep in mind in order to make optimum use of his boys, even after the technique of downfield blocking is taught and learned. He should supplement this knowledge with the following:

1. Stress desire and determination in blocking. This is still and always will be 75 per cent of blocking and tackling with the remaining 25 per cent delegated to the technique of "know-how." Have boys determined to get their man.
2. Diagram your plays with the best blocking angles possible. Do not expect a boy to make an impossible block.
3. Put great emphasis on downfield blocking at practice sessions.
4. Practice downfield blocking under game conditions as often as time permits.
5. Stress the boys' intelligence in handling the reactions of defensive backs.

It seems that the teaching of downfield blocking has been something of a hit-or-miss proposition with little attention be-

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POSITION.....

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To assist in conducting this tournament an advisory committee has been formed, consisting of the following: Herb Graffis, Editor, Golfdom and Golfing Magazines, John Griffith, Publisher, ATHLETIC JOURNAL, Eldon I. Jenne, Director, Health, Physical Education and Recreation, Portland {Ore.} Public Schools, Ted Payseur, Director of Athletics, Northwestern University, Robert J. Strauss, Supervisor of Golf, Public Recreation Commission, City of Cincinnati.

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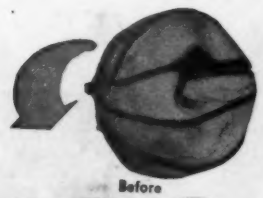

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ing paid to the changing situations which are caused by the reactions of defensive backs. If we have faith in M. J. Van Wagenen's definition of intelligence as: "the capacity to learn and to adjust to relatively new and changing conditions" let us put more emphasis on our boys' ability to think and adjust their actions accordingly rather than on mere luck or blind obedience.

Track and Field Records 1896-1946

(*continued from page* 28)

say that these days the average American boy is just larger, stronger, faster and has more spring in his legs. This may be partly true, but champions don't just happen. Topnotch performers in track and field have paid the price in time and hard practice. The outstanding records of today may be attributed, I believe, to improvements all along the line.

The population of the nation has increased greatly so that there are many more boys in high school and college. We have a higher standard of living with more time for recreation and sports. Most of our young men at one time or another have the opportunity for participating in athletics if so inclined. Sports and athletics are taught and encouraged in junior high school and even in the lower grade schools.

Advancement in Coaching and Training Technique

Great advancement has been made in the building of running tracks and in equipment. Modern tracks are noted for their spring and help a runner attain greater speed. Faster runways and better landing pits have had no small part in bettering the jumping marks. Great changes in pole vault technique resulted when bamboo poles replaced the ones made of ash and oak.

Fieldhouses and other indoor facilities have given the present-day athletes a decided advantage, especially in the more northern sections of the nation. Track is now ranked as a major sport and has a full schedule with more and more desirable trips; insignia and awards are also given to those who participate.

All of these are factors that contribute toward the advancement of the sport.

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(*continued from page 4*)

on the recommendation this spring. . . . Don't be surprised if it is announced very shortly that the high school and college football rules have been standardized, and will be the same, thus ending many years of needless bickering and further proving that the problems of one affect the other. You can't build a stone wall between the two as some tried to do.

* * *

BECAUSE this is Olympic year, this year's N. C. A. A. track and field program has taken on a strange aspect. Besides the unfamiliar metric measurement, there appear such items as steeple chase, hop, step and jump, hammer throw, and the longer races such as 5,000- and 10,000-meter run. And missing from the program is the N. C. A. A.'s classic concluding event, the mile relay. The competition in the pole vault will start at 12 feet, 6 inches. Any schools wanting the complete time schedule for the two-day meet can have a copy by dropping a note to this column. . . . A recent question posed by the Minnesota State High School League, regarding the conducting of A and B state basketball tournaments, found 52.3 per cent of the superintendents and 53.9 per cent of the coaches favor the two division classification. . . . Another high school coach has joined the collegiate ranks. John Murphy has been appointed backfield coach at Auburn under his team mate, Earl Brown. After graduating from Notre Dame, Murphy coached for eight years at Endicott, New York, High School, turning out three unbeaten teams. For the past two years he has been at Holy Trinity High School in Chicago.

* * *

SOL MISKIN, former minor league manager, has been appointed baseball coach at C. C. N. Y. . . . Nearby Brooklyn College appointed Theodore Rosequist head football coach. Rosequist played at Ohio State and then did a professional stint with the Bears and Rams. Rosequist succeeds Lou Oshins who will return to a full-time teaching schedule. . . . Dick Ainslie will handle the ball players for Creighton this year. Ainslie, assistant coach at Purdue, also coached at Whitman College for three years. . . . The Athletic Institute will sponsor a National Conference on Professional Preparation in Health, Education, Physical Education and Recreation. . . . Last summer 176 of 484 member schools of the Minnesota League participated in the famed Minnesota summer baseball program. . . . The latest firm to be honored by the Brand Names Foundation is Hillerich and Bradsby. The Brand Names Foundation is an organization devoted to the preservation of branded names which have been in the public eye for fifty or more years. A. G.

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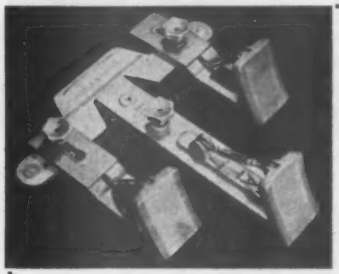

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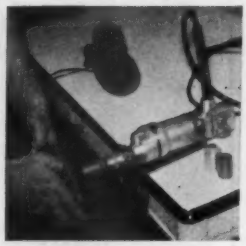
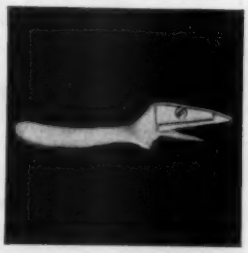
THE Raleigh Athletic Equipment Corporation of New Rochelle, New York has perfected a new football cleat gun that removes and puts on cleats in a jiffy. Now it is no longer necessary to struggle with pliers for this gun takes off stubborn cleats easily and puts them on securely. It is powered by a Universal Reversible motor 110 v 60 cycle, AC or DC current and can be used portably or attached to any table. This enables cleats to be changed during a game.



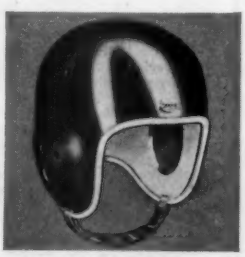
A NEW combination padlock that operates without keys is the product of the Corbin Cabinet Lock Division of the American Hardware Corporation, New Britain, Connecticut. The Corbin Sesamee padlock locks and unlocks by dialing the owner's *personally* selected combination number such as telephone or house number, anniversary or birth date. The shackles came in three lengths ⅞", 2½" and 5". The body of the lock is made of forged brass and the shackles are of case hardened nickel-plate.

A NEW bandage cutter designed by coach Harry Gilcrest has been recently released by the William C. Pickett Company, 500 East Chicago Street, Coldwater, Michigan. The instrument was designed to remove tight, thick, protective athletic bandages quickly and safely. One cutting motion eliminates tiring finger movements and it can, therefore, remove an ankle bandage in as little as two seconds. There is no exposed cutting edge and consequently no danger of jabbing. It uses a standard Schick blade. School price $1.75.



A NEW instrument for marking all types of athletic equipment has been developed by the Cushman and Denison Manufacturing Company of New York City. It is an automatic valve controlled pocket fountain brush that will make either fine or broad lines by the use of interchangeable hard felt nibs. This new brush permits markings on small as well as on large objects in eight transparent instant-drying inks. The instrument will mark on any surface including wax surfaces and fabrics.

A NEW plastic football helmet that is constructed in a one piece seamless moulded unit, is the innovation of C. R. Daniels, Incorporated, manufacturers of Dandux sporting goods. The material used in the helmet is pliolite, developed, tested and produced by the Goodyear Rubber Company. The material has plenty of "give," yet will not break and will absorb terrific impact and shock. The forehead, temples, sides of the face and base of the skull are protected with foam rubber padding covered with soft leather.



THE backboard suspension shown consists of only a single upright placed well off the court which reduces the possibilities of injury to players and allows more freedom of movement out of bounds. When used with a Nurre glass bank this suspension greatly improves the vision of end-of-court spectators by minimizing obstructions. Although the Nurre Companies, Bloomington, Indiana, do not manufacture the suspension they have prepared detailed description and drawing of it which will be mailed free on request.

Spalding and Brothers was the first sporting goods concern to be so honored.

* * *

THE state of Wisconsin is starting its centennial celebration, and the Wisconsin Interscholastic Athletic Association has prepared a list of its achievements, many of which are notable in the field of interscholastic athletics. As far back as 1898 the association required parental permission for athletic participation, limited the number of events in which a boy can compete in track in the year 1905, took over the control of state basketball tournament in 1917, and in 1921, joined with Illinois, Iowa and Michigan in the formation of the National Federation. . . . James Jordan, former Ithaca and Villanova College star and assistant coach at Lawrence, Massachusetts, High School, has been upped to the head spot succeeding Mark Devlin who retires from coaching after twenty-six years. The latter will devote full time to being athletic director. . . . From time to time this column has acted as a clearing house for coaches seeking new positions. Starting this year off we have: No. 1 has been in coaching for twenty-four years and has an outstanding record, his baseball teams winning 70 and losing 19; he has produced one world record holder in swimming and one national interscholastic record holder. His cross country teams have been state champions or runnerups six times in nine years. He holds a master's degree, has worked as a trainer and has had two and one-half years of schooling in medicine. He is interested in a position in a southern college, coaching minor sports and serving as a trainer's assistant. . . . No. 2 was formerly Lieutenant Commander in the Navy physical fitness program. He is a Notre Dame graduate with a bachelor's degree in physical education and with several years high school coaching experience. He desires an assistant coaching position in a university where courses can be taken leading to a master's degree. . . . No. 3 has coached for seventeen years, ten years in high school, two years as head coach at Moravian College, three years as head coach at Lafayette College and two years of coaching in professional ranks. He is interested in either high school or college coaching and teaching. . . . No. 4 is a certified teacher in English, French and natural science and has been head coach of football, basketball and baseball for four years in a large Georgia high school. He would like a similar position in Florida. . . . No. 5 is a highly successful Washington coach, having produced two undefeated teams in seven years. He would like a position in a large high school or college. More for next time.

Bob Klenck, former basketball coach and backfield assistant at St. Louis University, has entered the sporting goods business going with Lowe & Campbell in St. Louis.

A New Plan for Sports Promotion

(*continued from page* 18)

much more economically than can the conventional type of moving pictures.

The Institute, in an effort to make these films available to all schools, is underwriting the cost of production and other related costs. The only cost to the schools will be the price of raw film stock, printing and developing. This, incidentally, will bring the cost to a ridiculously low figure, well within the budget of even the smallest schools. In still a further effort to gain wide distribution of the strips, the Institute has placed bulk purchase orders for projectors with two of the leading manufacturers of this type of equipment. By the bulk purchase the Institute is able to save approximately 25 per cent of the listed selling price of such equipment. This saving will be passed along to the schools who need to buy equipment. A third feature which we consider of utmost importance is the study reference material. Schools may at their own option, secure booklets relative to the strips. These booklets measure three by four inches and will contain each picture appearing in the strip and every word of instruction. These will also be made available at cost, actually a matter of a few cents each.

The Institute has received the enthusiastic approval of leading coaches and administrators, both collegiate and high school, who are acting in an advisory capacity in the filming and production of the strips. The strips will be black and white or color, silent or with sound.

As to the questionnaire, this was mailed to the schools to determine what sports should be covered and in what order of priority. Anyone replying to the questionnaire is not in any way committed to buy strips. In fact, they are not ready for production as yet. However, the Institute is interested in the opinions of the coaches and physical educators of this country and their opinions will be used in helping them chart a course to follow. Therefore, if you have not mailed in the questionnaire, please do so at once.

An Explanation

We apologize to our readers for the lateness of our February and March issues. The truth of the matter is that it was caused by a matter over which we have had no control. There has been a nation wide labor unrest among printers and whether or not they are right, it is not for us to say. In an effort to return to our mailing date of the fifth of the month we have moved to a new printer. The future, we are quite sure, will see the Journal arriving when it should.

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MARCH, 1948

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BREAKFAST FOODS

General Mills, 47 ☐ Information

COACHING SCHOOLS

Wisconsin, University of, Summer Session, 61 ☐ Information

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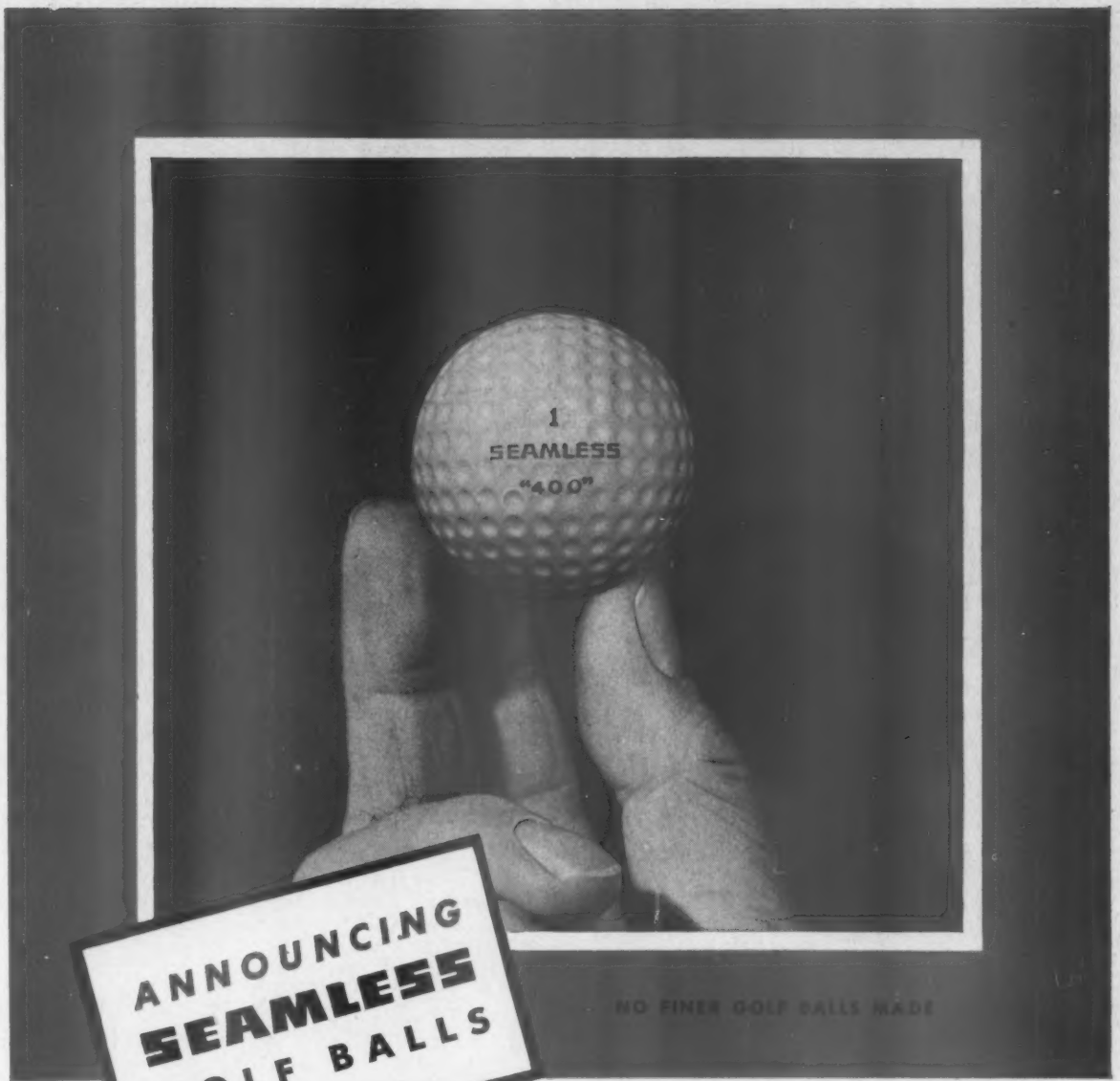
NAME _____ POSITION _____

SCHOOL _____

CITY _____ ZONE ____ STATE _____

INDEX TO ADVERTISERS

Al-En Knitting Mills 59
American Hair & Felt Co. 57
Award Incentives, Inc. 54
Beacon Falls Rubber Co. 35
Becton Dickinson Co. 44
Bike Web Mfg. Co. 39
Brooks Shoe Mfg. Co. 15
Bunny Knit Sportswear 48
Campus Sporting Goods Co. 58
Central Mfg. Co. 57
Champion Knitwear Co. 60
Clebar Watch Co. 64
Consolidated Laboratories, Inc. 55
Core, John T. 59
Cragin-Simplex Co. 52
Crouse-Hinds Co. 5
Daniels, C. R., Inc. 33
DeGroat, H. S. 52
Dolge Co., C. B. 6
Ducommun Co., M. 46
Dunlop Tire & Rubber Corp. 52
Du Pont de Nemours & Co., Inc., E. I. 53
Eagle Regalia Co. 64
General Mills, Inc. 47
Gilman, Marty 54
Golf Promotion 63
Goldsmith MacGregor, Inc., 41
Greene Co. 61
H. & R. Mfg. Co. 61
Hanna Mfg. Co. 55
Hillerich & Bradsby Co. 17
Hillyard Sales Co. 59
Horn, William H. & Brother 51
Huntington Laboratories, Inc. 42
Hyde Athletic Shoe Co. 19
Ivory System Cover 4
Kahnfast Athletic Fabrics 62
K. & P. Athletic Co., The 56
Linen Thread Co., Inc. 7
Logan, Inc. 57
McArthur & Sons, George 65
MacGregor Goldsmith, Inc. 41
McLaughlin-Millard, Inc. 58
Mages Sports Distributors, Inc. 64
Marba System 46
Matt Startmaster Co. 65
Mutual Life Insurance Co. of N. Y. 4
Naden & Sons Electric Scoreboard Co. 29
National Sports Equipment Co. 56
Nissen Trampoline Co. 61
Ocean Pool Supply Co. 60
O'Shea Knitting Mills 37
Pennsylvania Rubber Co. 25
Porter Corporation, J. E. 23
Raleigh Corporation 3
Rawlings Mfg. Co. Cover 2
Reach, Wright & Ditson, A. J. 13
Regalia Mfg. Co. 58
Riddell, Inc., John T. 45
Sand Knitting Mills 62
Seamless Rubber Co. Cover 3
Six Man Football Magazine 60
Spalding & Bros., A. G. 1, 13
Spot Bilt, Inc. 30
Time-O-Matic Co. 53
U. S. Rubber Co. 56
Voit Rubber Corp. 21
Wilson Sporting Goods Co. 27
Wisconsin, University of, Summer Session 61
Wyeth, Inc. 49



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